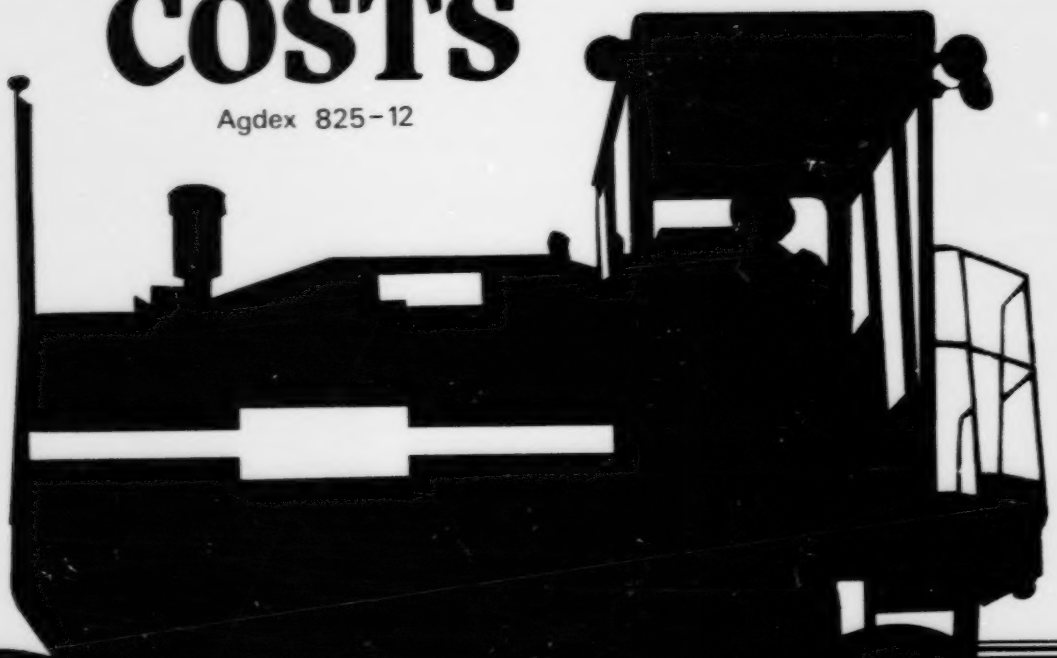
S

FARM MACHINERY COSTS

Agdex 825-12



Alberta
AGRICULTURE
Economic Services Division
Production Economics Branch

Operating and
Ownership Components
MARCH, 1982.

Copies of this publication may be obtained from:

Print Media Branch
Alberta Agriculture
7000 – 113 Street
Edmonton, Alberta, T6H 5T6
OR
Alberta Agriculture's district offices

1983 03 2.5M

FARM MACHINERY COSTS

By
Lloyd J. Andruchow
Agricultural Economist
Alberta Department of Agriculture

Economic Services Division
Production Economics Branch
Alberta Department of Agriculture

August, 1982

FOREWORD

Between 1980 and 1982 the average price of a typical 105 h.p. tractor increased by 25 per cent. Ownership costs were up 25 per cent, while operating costs climbed 75 per cent during the two year period. Because the cost of owning and operating farm machinery is surpassed by only farm land costs in farm production, farm managers need to carefully examine the options of renting, leasing, custom hiring and purchasing their farm equipment. The timing of trade-in and the trade-in value of machinery also require careful consideration.

This publication is the sixth in a series of farm machinery reports published since 1972. It provides farmers, research workers, extension personnel and agribusiness with the most recent information on operating and ownership costs of farm machinery commonly used in Western Canada. The publication also provides a framework to assist the farm manager in evaluating his machinery options. Farm operators are advised to substitute their own numbers where those numbers in the report do not accurately represent their own farming operations.

Dr. Carlyle Ross
Head
Production Economics Branch

ACKNOWLEDGEMENTS

I wish to express my sincere appreciation to the many distributors of farm equipment in Alberta for their co-operation in supplying us with necessary 1982 retail price data. Their contribution has added to the representativeness and accuracy of machine costs as provided in this report.

Special acknowledgement is due to Mr. Allan Presiznuk who worked diligently in obtaining and compiling the necessary information required for the completion of this report.

Finally, thanks are due to several members of the Production Economics Branch who participated actively in the preparation of this report.

Lloyd J. Andruchow

TABLE OF CONTENTS

		Page
FOREWORD	.....	i
ACKNOWLEDGEMENTS	.....	ii
TABLE OF CONTENTS	.....	iii
LIST OF TABLES	.....	iv
ALPHABETICAL INDEX FOR TABLE 5	.....	x
LIST OF FIGURES	.....	ix
PURPOSE AND SCOPE OF THE STUDY	.....	2
SOURCE OF DATA	.....	4
SECTION I - Terms and Concepts of Machinery Costs		1
Fixed Costs	.....	6
Variable Costs	.....	15
Labour Costs	.....	21
SECTION II - Ownership and Operating Cost Per Hour Retail Prices of Farm Machinery in Alberta, 1980		23
Notes and Comments	.....	109
SECTION III - Applications	.....	118
BIBLIOGRAPHY	.....	160
SOURCES OF FARM MACHINERY PRICES	.....	162

LIST OF TABLES

		Page
TABLE 1	FREIGHT RATES ON AGRICULTURAL IMPLEMENTS	5
TABLE 2	REMAINING FARM VALUE AS PERCENT OF NEW COSTS	7
TABLE 3	CALCULATION OF LOAN INTEREST AND OPPORTUNITY COSTS FOR A TYPICAL FARM TRACTOR.....	11
TABLE 4	CALCULATION OF BUILDING COSTS	14
TABLE 5	TOTAL ACCUMULATED REPAIRS FOR FARM TRACTORS AND IMPLEMENTS	19
TABLE 6	MACHINE COSTS PER HOUR	
	TRACTORS	24
	TILLAGE EQUIPMENT	
	Cultivators - Noble	29
	Chisel Plows	30
	Cultivators - Field	33
	Cultivators - Row Crop - (See Row Crop Section)	
	Discs	39
	Discers	43
	Harrow Drawbars	44
	Harrow Sets	45
	Mulchers - Pulvi-Mulchers (Roller Harrow).....	48
	Plows	48
	Rod Weeders	50
	Rotary Tillers (Roto-Tillers)	52
	Stubble Treader	29
	Econorod	30
	PLANTING EQUIPMENT	
	Air Seeders	55
	Standard - End Wheel - Disc Opener	53
	Press - Disc Opener	53
	Press - Hoe Opener	53
	Drill Fillers - Auger	56
	ROW CROP EQUIPMENT	
	Corn Headers	63
	Corn Planter	61
	Cultivators	57
	Ridgers	57
	Harvester	57
	Piler	57
	Potato Planter	58

LIST OF TABLES cont'd

ROW CROP EQUIPMENT - cont'd — Page

Ridgers 57
Scooper 58
Seed Cutter 58
Tube Piler 57
Sugar Beet 59
Defoliator 60
Harvester 59
Planter 58
Thinner 59
Top Saver 50
Sprayers - Row Crop 60
Bean Cutter 60

HAY MACHINERY

Balers 64
Bale Elevators 64
Bale Stookers 65
Bale Wagons - Automatic 66
Big Bale Movers 66
Forage Box - Unloading 67
Forage Blowers 67
Forage Choppers - Rotary 67
Forage Harvesters 67
Hay Stackers - Hydraulic 68
Hay Stack Mover 68
Mowers 69
Mower Conditioners 69
Rakes 70

GRAIN HARVEST MACHINERY

Combines - Self Propelled 71
- Axial Separation 71
- Power Take Off 71
Pick-ups 72
Swathers - Grain 72

IRRIGATION EQUIPMENT

Irrigation Systems
Wheel Move - (side roll) 74
Centre Pivot 74
Travelling Gun 74
Main Lines 75
Pumping Units 75
Ditchers 76

LIST OF TABLES cont'd

IRRIGATION EQUIPMENT (cont'd) Page

Land Planes 76
Pipe Trailers 77

FEEDING AND FEED HANDLING EQUIPMENT

Mixer Mills 78
Mixer Feeder Wagons 78
Roller Mills 79
Tub Mills - Grinders 79
Silage Loader 80

MISCELLANEOUS MACHINES

Anhydrous Ammonia Applicator 81
Cold Flow Converter 82
Pneumatic Grain Mover 82
Grain Augers 83
Cattle Squeeze 82
Cattle Scale 82
Delevan Kit 101
Dozer Blades 86
Engines - Air-Cooled 88
Generator - Standby 88
Grain Dryers 90
Hydraulic Tractor Loaders 89
Motorcycles 91
3 Wheel Bikes 91
All Terrain Vehicles 92
Motors - Electric 92
Packers 93
Packer Draw Bars 94
Post Augers and Drivers 95
Rock Pickers and Windrowers 95
Rotary Cutters 96
Skid Steer Loaders 81
Snow Blowers 97
Snowmobiles 91
Sprayers - Field 97
Granular Herbicide Attachment 101
Spreaders - Dry Fertilizer 101
- Manure 102
Sub Soilers 103
Silage Wagons 104
Wagons 104

TRUCKS
Farm Trucks 105
Hydraulic Hoists 106
Grain Boxes 106

LIST OF TABLES cont'd

		Page
TABLE 7	MACHINERY OPTIONS	110
TABLE 8	COMPUTATION OF CUSTOM RATES	124
TABLE 9	MACHINE EFFICIENCIES AND PERFORMANCE	128
TABLE 10	ACRES PER HOUR PER MILE PER HOUR AT VARIOUS FIELD EFFICIENCIES	131
Table D.1	Annual Depreciation Cost per Hour-Tractors	133
Table 1.1	Annual Interest Cost per Hour-Tractors	134
Table D.2	Annual Depreciation Cost per Hour-Group 1	135
Table 1.2	Annual Interest Cost per Hour-Group 1	136
Table D.3	Annual Depreciation Cost per Hour-Group 1	137
Table 1.3	Annual Interest Cost per Hour-Group 1	138
Table D.4	Annual Depreciation Cost per Hour-Group 2	139
Table 1.4	Annual Interest Cost per Hour-Group 2	140
Table D.5	Annual Depreciation Cost per Hour-Group 3	141
Table 1.5	Annual Interest Cost per Hour-Group 3	142
Table D.6	Annual Depreciation Cost per Hour-Group 3	143
Table 1.6	Annual Interest Cost per Hour-Group 3	144

ANNUAL REPAIR COSTS PER HOUR:

Table R.1	Tractors	145
Table R.2	Repair Schedule For:.....	146
	-All terrian vehicles	-Combine pick-up
	-Engine (air-cooled)	-Motorcycle
	-Combine SP. & PTO	-Rock picker
	-Snowblower	-Snowmobile
	-Skid steer loader	-3 wheel bikes
Table R.3	Repair Schedule For:	147
	-Beet defoliator	-Grain dryer
	-Beet topper	-Hyr. tractor loader
	-Cattle squeeze	-Land leveller
	-Ditcher	-Land spreader
	-Ditch filler	-Manure Spreader
	-Dozer blade	-Mixer mill
	-Electric motor	-Subsoiler
	-Generator	-Silage wagon

LIST OF TABLES cont'd

			Page
Table R.4	Repair Schedule For:		148
	-Irrigation system	-Main line	
	-Motor transport	-Pipe trailer	
	-Pumping unit		
Table R.5	Repair Schedule For:		149
	-Forage blower	-Grain box	
	-Forage chopper	-Post auger	
	-Forage havester	-Post driver	
	-Grain auger(small)	-Potato piler	
	-Potato scooper	-Potato seed cutter	
	-Rotary cutter	-Sprayer	
	-Silage loader	-Corn header	
	-Delevan kit		
Table R.6	Repair Schedule For:		150
	-Baler	-Forage box	
	-Bale elevator	-Grain augers (large)	
	-Bale wagon	-Green bean harvester	
	-Beet harvester	-Green pea harvester	
	-Beet top saver	-Mixer feeder wagon	
	-Beet thinner	-Roller mill	
	-Corn harvester	-Vegetable harvester	
Table R.7	Repair Schedule For:		151
	-Air seeders		
	-Grain drill		
Table R.8	Repair Schedule For:		152
	-Bale stooker	-Stack builder	
	-Hay stacker	-Stack feeder	
	-Mower	-Stack mover	
	-Mower conditioner	-Swather	
	-Rake		
Table R.9	Repair Schedule For:		153
	-Tilt box	-Wagon	
Table R.10	Repair Schedule For:		154
	-Dry fertilizer spreader	-Anhydrous applicators	
	-Cold flow converter	-Granular herbicide kit	
Table R.11	Repair Schedule For:		155
	-Hay cuber	-Tub mill	

LIST OF TABLES cont'd

		Page
Table R.12	Repair Schedule For: ..... -Stubble treader -Chisel plow i) noble ii) field iii) row crop -Disc -Discer -Harrow drawbar -Rotary tiller (Roto-tiller) -Econorod -Ridger -Planters i) beet ii) corn iii) potato iv) vegetable -Plow, moldboard -Pulvi-mulcher -Rod weeder -Rotary cultivator (hoe) -Tool bars -Packer drawbar	156
Table R.13	Repair Schedule For: ..... -Trucks -Garden tractors	157
Table R.14	Repair Schedule For: ..... -Potato Harvester	158
Table R.15	Repair Schedule For: ..... -Truck Hoists	159

LIST OF FIGURES

Figure 1	Remaining Values for Farm Machinery as a Percentage of New Implements	8
Figure 2	Total Accumulated Repair Costs for Farm Tractors and Implements	18
Figure 3	Breakdown of Cost Items - Diesel Tractors	120
Figure 4	Typical Cost Curves	121

ALPHABETICAL INDEX FOR TABLE 6

MACHINE	Page
Air-cooled engines	88
Air seeders	55
All-terrain vehicle	92
Anhydrous ammonia applicator	81
Auger: Grain	83
Post	95
Bale Elevator	64
Bale Mover	66
Bale Stooker	65
Bale Wagon	66
Baler	64
Bikes: Three wheel	92
Blade: Dozer	86
Blower: Forage	67
Snow	97
Box: Forage	67
Grain (Truck)	106
Bunk Feeder (Mixer Feeder Wagon)	78
Cattle Scale	82
Cattle Squeeze	82
Chisel Plow	30
Chopper: Forage	67
Cold Flow Converter	82

MACHINE

	Page
Combine: Axial	71
Pick-up	71
PTO	71
Self-Propelled	71
Corn Header: Combine	63
Forage Harvester	63
Cultivator: Field	33
Noble Blade	29
Row Crop	57
Vibrashank	37
Cutter: Potato Seed	58
Rotary	96
Defoliator: Sugar Beet	60
Delevan Kit	101
Disc	39
Discer	43
Ditcher	76
Dozer Blade	86
Drawbar: Harrow	44
Drawbar: Packer	94
Drill: Air	55
End Wheel	53
Press	53
Zero Till	54
Drill Fill	56

MACHINE

	Page
Driver: Post	95
Dryer: Grain	90
Econorods	30
Elevator: Bale	64
Electric: Motor	92
Stand by Generator	88
Engine: Air Cooled	88
Feeder: Bunk (Mixer Feeder Wagon)	78
Fertilizer Spreader	101
Field: Cultivator	33
Sprayer	97
Fill: Drill	56
Forage: Blower	67
Box	67
Chopper	67
Harvester	67
Garden Tractor Attachments	28
Generator: Stand by Electric	88
Grain: Auger	83
Box	106
Drill	56
Dryer	90
Mover - Pneumatic	82
Granular Herbicide Attachment	101

MACHINE

	Page
Harrow: Drawbar	44
Sections	46
Sets	45
Hay: Stacker	68
Stack Mover	68
Harvester: Forage	67
Potato	57
Sugar Beet	59
Herbicide, Granular Attachment	101
Hoist: Truck	106
Hydraulic Loader	89
Irrigation Systems	74
Centre Pivot	74
Complete Take-down	74
Corner Pivot	74
Long Line	74
Main Line	75
Pipe Trailer	77
Pumping Units	75
Travelling Gun	74
Wheel Move	74
Land Plane	76
Loader: Hydraulic	89
Silage	80
Skid Steer	81

MACHINE

		Page
Manure Spreader:	Beater	102
	Liquid	103
Mill:	Roller	78
	Tub	79
Mixer Feeder Wagon (Bunk Feeder)		78
Mixer Mill		78
Moldboard Plow		48
Motor: Electric		92
Motorcycle		91
Mover:	Bale	66
	Pneumatic Grain	82
	Stack	68
Mower		69
Mower - Conditioner		69
Noble Blade Cultivator		29
Packer		93
Packer Drawbar		94
Picker: Rock		95
Pick-up: Combine		72
Piler: Potato		57
Plane: Land		76
Plow:	Chisel	30
	Moldboard	48
Planter:	Corn	61
	Potato	58
	Sugar Beet	58

MACHINE

	Page
Pneumatic Grain Mover	82
Post: Auger	95
Driver	95
Potato: Harvester	57
Piler	57
Planter	58
Scooper	58
Seed Cutter	58
Tube Piler	57
Pulvimulcher	48
Rake	70
Ridgers	57
Rock: Picker	95
Windrower	95
Rod Weeder	50
Roller Mill	78
Rotary: Cutter	96
Tiller	52
Row Crop: Cultivator	57
Planter	58
Sprayer	60
Scale: Cattle	82
Scooper: Potato	58
Seed Cutter: Potato	58

MACHINE

	Page
Silage: Loader	80
Wagon	104
Skid Steer Loaders	81
Snow Blower	97
Sprayer: Field	97
Row Crop	60
Spreader: Dry Fertilizer	101
Manure	102
Squeeze: Cattle	82
Stack: Mover	68
Stacker: Hay	68
Stooker: Bale	65
Stubble Treader	29
Sub-soiler	103
Sugar Beet: Defoliator	60
Harvester	59
Planter	58
Thinner	59
Top Saver	59
Swather	72
Thinner: Sugar Beet	59
Tiller: Rotary	52
Top Saver: Sugar Beet	59
Tractor: 2 Wheel Drive	24
4 Wheel Drive	26
Garden	26

MACHINE

	Page
Truck	105
Truck: Box	106
Hoist	106
Tub Mill	79
Tube Piler: Potato	57
Vehicle: All-Terrain	92
Wagon	104
Wagon: Bale	66
Silage	104
Weeder: Rod	50
Windrower: Rock	95

SECTION I

TERMS AND CONCEPTS OF MACHINERY COSTS

PURPOSE AND SCOPE OF THE STUDY

The purpose of this study is to present costs of owning and operating farm machinery. An attempt has been made to analyze the economic aspect of farm machine use and to provide such data for all types of farm machinery that are currently used in agricultural production.

The report has been divided into three sections, each of which emphasizes a particular aspect. Though interrelated, each section can be referred to separately for specific data or information.

SECTION I (Page 1) describes the basic factors associated with cost analysis. Concepts of fixed and variable costs are discussed and applied directly to the other sections.

SECTION II (Page 23) is a sequence of tables containing retail prices and hourly costs of all machines listed. Each cost component can be identified separately as to the amount it contributes to the total hourly cost. The basis of all calculations for the cost Tables in Section III are shown at the end of the Section, page 109. This is followed on page 110 by a list of machinery options with their respective prices and an explanation of the combine classes. The hourly costs for machinery in this study have been assumed to be applicable to Alberta conditions. Variations in cost due to peculiar regional characteristics or special operating circumstances are not considered. For this reason, it is intended as a quick reference for:

1. farm operators who wish to compare the cost of different machine types and sizes.

2. research groups involved in studies of production costs, resource use and comparative advantage.
3. extension personnel and credit managers who maintain close contact with farmers and who are often called upon to evaluate credit requirements, the profitability of adding enterprises or expanding existing ones, placing values on used equipment, etc.

SECTION III (Page 117) is designed primarily to show some important applications of costing specific machine operations, efficiencies and performance. The tables presented are for determining annual costs for machines having varying annual use and years of ownership. Farm operators will find this section most useful in management decisions which involve:

1. projecting fixed and variable costs per acre, per hour and per unit of output (e.g. bushels, hundred weight etc.) over a specified time period.
2. the design of complete production systems which consider limitations or requirements of capital and labour.
3. purchasing, leasing or renting machinery.
4. establishing reasonable charges for custom operations.
5. knowing when to trade a machine.
6. whether to buy a new or used machine.

SOURCE OF DATA

Machinery Prices

The prices shown in Section II of this study are the average retail list prices for March 1982 (less a sales tax) quoted by the major manufacturers and distributors who sell farm equipment in Alberta. Included in the average price is the cost of transportation from the place of manufacture to the major distribution points in Alberta. The data gathered was based upon current costs and have been used to update the "1980 Farm Machinery Costs" publication. Since 1980, some machines have remained relatively unchanged due to:

1. old stock being offered for sale.
2. discontinuation of production for some machines.

As a cautionary note, prices in this publication cannot be compared with that reported in previous publications as the number of prices used in the averaging has changed due to the discontinuation of certain lines of equipment. Table 1 lists the rail and truck freight rates from American and Canadian factories to major distribution points in Alberta. In the case of units which cannot be loaded to minimum cargo weight higher freight rates are charged.

Cost Data

In developing the hourly cost schedules, consideration was given to past and recent publications, as well as, research bulletins from Canada and the United States which dealt with this subject. Differences in quality of machine, type of land, degree of care and maintenance etc. all have an influence on hourly machinery costs. The data presented should be used as an "up-to-date" guide and be modified to fit local conditions where more specific information is available.

TABLE 1:

RAIL AND TRUCK FREIGHT RATES ON AGRICULTURAL IMPLEMENTS[1]

(1) RAIL:

Origin	Minimum Weight lbs.	Destination			
		LETHBRIDGE	CALGARY	EDMONTON	GRANDE PRAIRIE
		Rates in ¢ per 100 lbs.			
Cedar Rapids, Ia.	50,000	735	754	773	923
Moline, Ill.	50,000	764	783	802	952
New York	50,000	1106	1124	1144	1294
Winnipeg	50,000	402	402	402	719
Toronto	20,000	1149	1195	1174	1357
	50,000	941	980	962	1113
(2) TRUCK:					
Toronto	45,000	1198	1198	1198	1486

1) Source: Rail and Truck Tariffs

FIXED COSTS

Fixed costs or ownership costs include depreciation, interest on investment, taxes, insurance and housing. These are mainly a function of time rather than annual use. Hourly fixed costs can be reduced by increasing the number of hours used per year.

Depreciation

Depreciation is defined as the loss in value over time due mainly to obsolescence. Although wear does contribute to depreciation, no reliable data is available as to how much varying amounts of use contribute to depreciation. Depreciation of this nature, however, would be a variable and not a fixed cost. The loss in value of a machine can simply be represented by the following formula:

$$\text{Depreciation overtime } t = \frac{V_1 - V_2}{t_2 - t_1}$$

where t = time expressed in hours or years

$V_1 - V_2$ = decrease in value expressed in dollars over the time period $t_2 - t_1$

$t_2 - t_1$ = total hours or years elapsed from time of original value (V_1) to end value (V_2).

In crop production accounting, depreciation costs expressed in dollars per acre or per hour are spread evenly over the accumulated use of the equipment. Although the actual depreciation can never be known until the equipment is sold, remaining value formulae have been developed from a knowledge of used equipment values.

Results of research work in the United States to determine actual depreciation rates for farm machinery appear in two publications:

1. Official Tractor and Farm Equipment Guide, published by the National Farm and Power Equipment Dealer's Association;

2. National Farm Tractor and Implement Blue Book, published by National Market Reports, Inc.

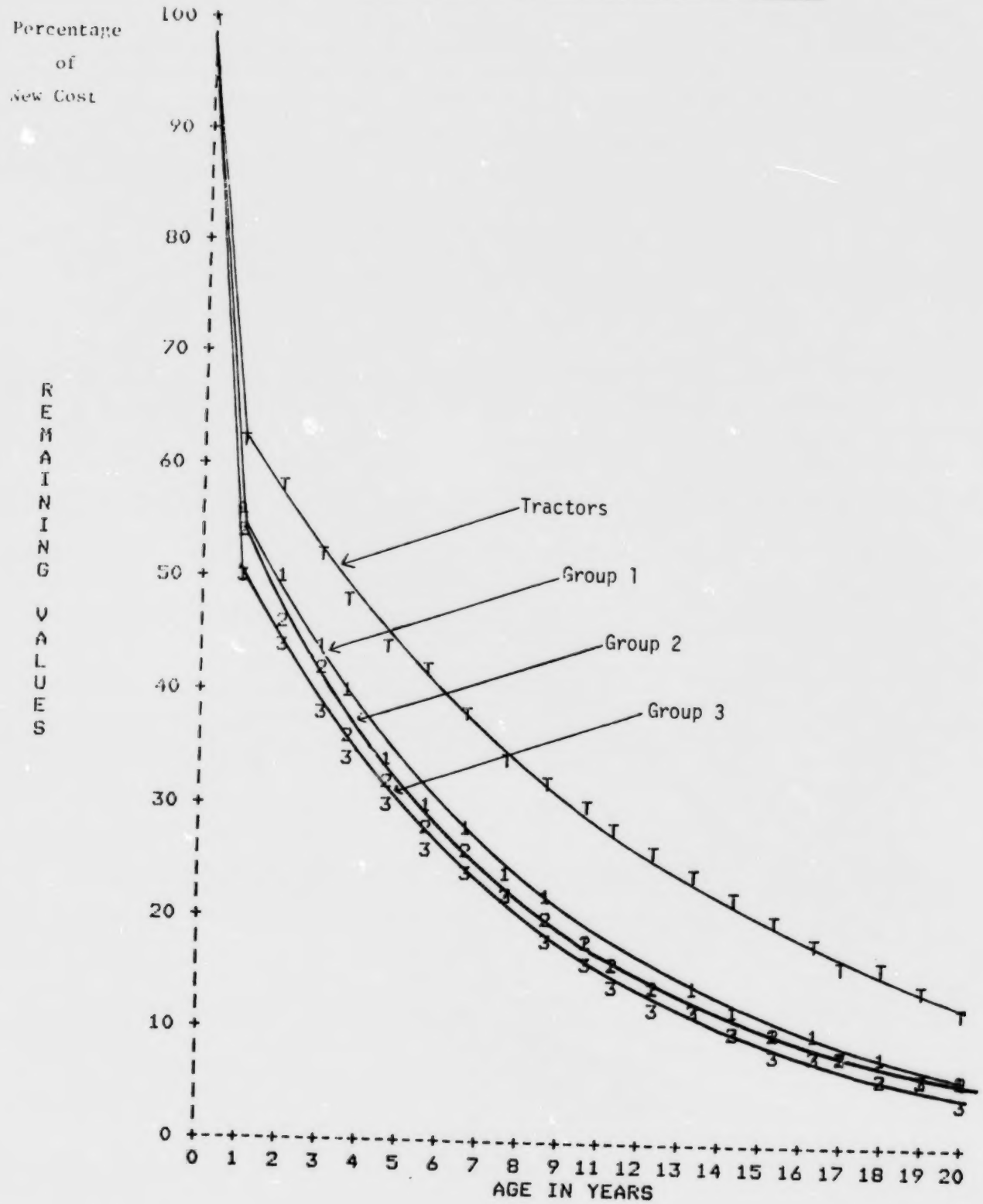
The formulae developed include the use of a first year correction factor to account for the sharp drop in value during the first year of ownership due to obsolescence.

For the purpose of this study, these formulae were assumed to represent the depreciation rates for farm machinery in Alberta. The Table below shows the remaining farm values of machinery as a percentage of original purchase price for a 20 year ownership period. These relationships are also illustrated on page 8, Figure 1.

Table 2 — Remaining Farm Value as Percent of New Cost

End of Year	Tractor	Group 1	Group 2	Group 3
1	62.3	56.6	53.1	49.6
2	57.6	50.1	47.0	43.9
3	53.0	44.4	41.6	38.8
4	48.7	39.3	36.8	34.4
5	44.8	34.7	32.6	30.4
6	41.2	30.7	28.8	26.9
7	37.9	27.2	25.5	23.8
8	34.9	24.1	22.6	21.1
9	32.1	21.3	20.0	18.6
10	29.5	18.9	17.7	16.5
11	27.2	16.7	15.7	14.6
12	25.0	14.8	13.9	12.9
13	23.0	13.1	12.3	11.4
14	21.2	11.6	10.8	10.1
15	19.5	10.2	9.6	9.0
16	17.9	9.1	8.5	7.9
17	16.5	8.0	7.5	7.0
18	15.2	7.1	6.7	6.2
19	13.9	6.3	5.9	5.5
20	12.8	5.6	5.2	4.9

Figure 1 REMAINING VALUES FOR FARM MACHINERY



Tractors:

Garden tractors
2 wheel drive
4 wheel drive

GROUP 1 INCLUDES:

Combine
Combine pick-up
Irrigation systems
Main line
Pipe trailer
Pumping unit
Skid steer loaders
Swather
Tilt box
Wagon

GROUP 2 INCLUDES:

All terrain vehicles
Anhydrous Applicators
Bale mover
Bale stookers
Bale wagon
Beet harvester
Beet defoliator
Beet topper
Beet top saver
Beet thinner
Cattle scale
Cattle squeeze
Chisel plows
Cold Flow converter
Cultivators
- Noble Blade
- Field
- Vibrashank
- Row crop
Delevan kit
Discs
Discers
Ditchers
Drills
Dozer blades
Engines - air-cooled
Electric motors
Forage blowers
Forage blower-processor
Forage choppers
Generators
Garden Tractor Attach.
Grain Boxes
Grain Dryers
Granular Herbicide Kits
Harrows
Harrow Drawbars
Haystacker
Hydraulic Loader
Land Planes
Motorcycles
Mowers
Mower Conditioners
Packers
Packer Drawbars
Planters-Potato
-Sugar Beet
-Corn
Snowmobiles
Three Wheel bikes
Plows
Post Augers
Post Dryers
Potato Harvester
Potato Piler
Potato Seed Cutter
Potato Scooper
Pulvimulcher
Rakes
Rock Pickers
Rock Windrowers
Rod Weeders
Rotary Cutters
Rotary Tillers
Silage Loader
Sprayers
Stack mover
Snowblowers
Spreaders-fertilizer
-manure
Sub soiler
Trucks
Truck Boxes
Truck Hoists

GROUP 3 INCLUDES:

Baler	Grain auger	Roller mill
Bale elevator	Hay stacker	Tub mill
Corn Header	Mixer feeder wagon	
Drill filler	Mixer Mill	
Forage box	Pneumatic grain mover	
Forage harvester		

Estimated depreciation costs per hour per $1,000 "new machine cost" are shown in Tables D.1, D.2, D.3, D.4, D.5, and D.6 of Section 3 for varying amounts of annual hourly use and for each year up to a maximum of 20 years of life.

REMAINING VALUES FOR FARM MACHINERY

Tractors = $(100 - [68(.92)^n]/100$ X New Cost

Group 1 Implements = $(100 - [64(.885)^n]/100)$ X New Cost

Group 2 Implements = $(100 - [60(.885)^n]/100)$ X New Cost

Group 3 Implements = $(100 - [56(.885)^n]/100)$ X New Cost

In Section 2, depreciation charges were calculated for the expected useful life. The results obtained approach the straight line method of depreciation where:

$$\text{Avg. Deprec. per Hr.} = \frac{\text{Initial Cost - Salvage Value}}{\text{Years Useful Life x Avg. Hrs. per Year}}$$

Interest

Interest costs occur in two forms and must be considered in the ownership of farm equipment. Whether machines are purchased on borrowed funds or for cash, interest costs will apply. Firstly, the cost of financing a machine purchased on credit will be most important as these costs are paid by the machine owner. The current interest rate

used for financing farm equipment is 15.0 percent. Secondly, machines can be purchased for cash resulting in no actual interest costs being incurred. However, by tying up money in fixed assets, the owner has committed money that could otherwise be earning a guaranteed premium if invested in an alternative use. An interest rate usually associated with opportunity cost is the return on low risk investment such as interest earned on government bonds. The current interest rate used for opportunity cost is 15.0 percent.

Example: a 150 H.P. tractor was purchased for $65,453 and kept for 10 years. After this period the tractor would have a trade-in value of $19,309. A 25 percent down payment is required with the balance financed over 6 years at a rate of 18 percent. The return for low risk investment is 15 percent. Calculations are shown in Table 3.

TABLE 3: Calculation of Loan Interest and Opportunity Costs For A Typical Farm Tractor

Age of Tractor	Book Value	Market Value (Inflation Adjusted)	Equity Payments	Deprec.	Interest	Equity	Opportunity Cost
0	65453	--	16363	--	--	--	--
1	40777	43224	8182	24676	8836	2314	347
2	37701	42376	8182	3076	7363	9648	1447
3	34690	41316	8182	3011	5891	16770	2516
4	31876	40164	8182	2814	4418	23800	3570
5	29323	39234	8182	2553	2945	31052	4658
6	26967	38266	8182	2356	1472	38266	5740
7	24807	37310	--	2160	--	37310	5597
8	22843	36412	--	1964	--	36412	5462
9	21010	35486	--	1833	--	35486	5323
10	19309	34582	--	1701	--	34582	5187
TOTAL			65453	46144	30925		39847

The example is included to show how the principle of opportunity cost can be applied to machinery ownership. As the money required to purchase the tractor was borrowed and financed over a six year term, interest payments to the bank totalled $30,925. Interest costs are treated as an annual fixed expenditure and if considered necessary in making the purchase possible, may be included in the calculation of equity. However, equity as calculated in Table 3 approaches the market value concept and at any point in time is based on the market value of the tractor adjusted by an assumed inflation rate of 6 per cent less the total amount owing. Thus, the equity in the tractor at any point in time equals the market value of the tractor less the accumulated loan payments remaining. For example, the equity in the tractor after year 3 equals (41,316) - (8,182 + 8,182 + 8,182) or $16,770. Since you have $16,770 tied up in the tractor which can be invested in an alternative use, an opportunity cost can be applied. Hopefully, the returns from using the tractor would offset the opportunity cost. Equity in the tractor reaches its maximum at the end of year 6 at which time the last principal and interest payments are made. Total bank interest paid during the term of ownership is $30,925 while the opportunity cost on the equity totals $39,847. If the tractor is used 800 hours per year, the average hourly interest cost over the 10 year period is $8.85.

In Section 2, interest costs are calculated on the basis of the average value of the machine during the ownership period. Average value figures are listed in Table 2 for the four different classes of farm equipment. The interest rate used was 15.0 percent which represented the average rate charged by lending institutions for intermediate financing.

Insurance

Insurance on equipment is necessary to protect machinery owners against hazards such as fire and accidents. Numerous insurance policies are available with varying degrees of coverage. The average rate is $0.45 per $100 value. In Section 2, insurance costs were calculated at this rate on the average value over the estimated life.

Housing

Housing costs are the result of having machine sheds for storage and shelter. Whether these buildings are present on a farm or not, a charge for housing is justified since without them weathering and deterioration will increase repair rates. Since housing costs are dependent on space requirements rather than the value of the machine, present day building costs (shown in Table 4), were determined and applied to each machine listed in Section 2. The cost used was $0.74 per square foot.

Table 4

CALCULATION OF ANNUAL BUILDING COSTS PER SQUARE FOOT

Type	Metal Quonset		Wooden Arch Rib
Size	40 x 100		40 x 100
New Cost	$6.98/sq. ft.		$5.55
Total Cost(1)	$27920.00		$22,200.00
Average	$13,960.00		$11,100.00
Interest at 15%(2)	$2094.00		$1665.00
Depreciation (30 yr)	$930.67 (30 yr)		$740.00
Repairs(3) (.2%)	$55.84 (1%)		$222.00
Insurance(4) (.42¢/100)	$117.26	(.48¢/$100)	$106.56
Total Annual Cost	$3197.77		$2733.56
Annual Cost Average	$0.80/sq. ft.	($0.740/sq. ft.)	$0.68/sq. ft.

(1) Total Cost includes concrete footing, 14' x 20' sliding door, entry door, 2 louvres and erection costs.

(2) Interest rate is an average of rates from different lending organizations: Farm Credit Corporation, Alberta Development Corp., Chartered Banks -- Farm Improvement Loan Act.

(3) Repair costs are significantly higher for the wooden arch rib; ashphalt shingles will be replaced at about the 15-year-life stage thereby, reflecting a 30 year life.

(4) Insurance costs represent those for fires; extended coverage include windstorms, hail and explosions.

VARIABLE COSTS

Variable costs or operating costs include fuel, lubrication, repairs and maintenance. These costs are a function of use and increase at a constant or varying rates with hours used per year. Due to wear, part failures and accidents, repair and maintenance costs are increasing to keep a machine operating.

Fuel

Fuel consumption for tractors was based on the Nebraska test data. For all classes of tractors in Section 2, the fuel consumption was calculated at 75 per cent of pull at maximum power. This load gives the best fuel efficiency under field conditions and can be estimated by the following formulae:

Diesel Tractors, Gal(1)/Hr. = 0.0474 x Max. PTO HP
Gasoline Tractors, Gal/Hr. = 0.0741 x Max. PTO HP
Propane Tractors, Gal/Hr = 0.0889 x Max. PTO HP

For crawler tractors, fuel consumption per hour is 105 to 115 percent greater than for wheel tractors.

Fuel prices assumed in the study were $1.25 per gallon (27.8¢ per litre) for diesel, $1.28 per gallon (28.4¢ per litre) for gasoline and 63.7¢ per gallon (14.0¢ per litre) for propane. When calculating costs for irrigation equipment, natural gas was priced at $2.35 per thousand cubic feet and electric power at 4.61¢ per kilowatt hour.

Fuel consumption for other power equipment was made by adjusting the rated motor horsepower to that of the appropriate tractor size. Reference was made to the actual machine specifications for confirmation of results.

---

(1) Imperial gallons.

Lubrication

Lubrication is the cost of oil, grease, filters, etc. For tractors this was assumed at 15 percent of fuel cost(2). For non-power equipment such as tillage equipment, lubrication costs were established with reference to previous studies. The increased use of sealed bearings has actually reduced the amount of grease required to lubricate many farm implements.

Repairs

Repair and maintenance costs include all parts, labour and workshop facilities required to keep machinery in efficient operating condition and to maintain its usefulness and reliability up to and perhaps beyond the estimated life. In this study, the assumption was made that increased usage would result in higher repair rates and costs rather than greater depreciation. Theoretically, if two machines of the same type, model etc., were operated under similar working conditions, they should be evaluated at the same price at the end of the same time period, even though one had been used twice as many hours as the other. The reason for this is that the machine that was used twice as much will have been repaired to make it as reliable as the other one.

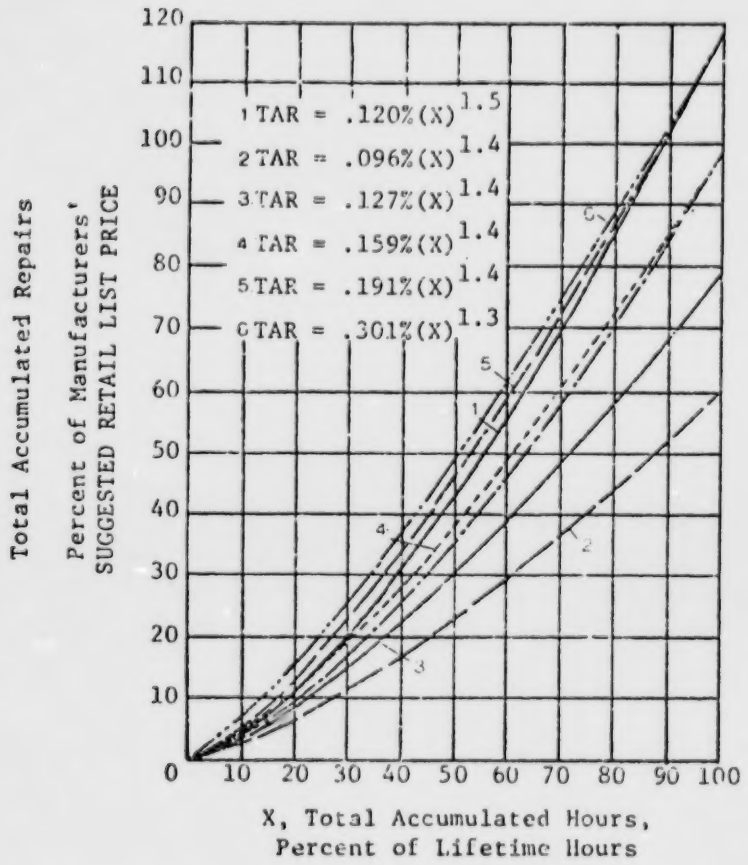
In addition to the problem of predicting actual repair rates over the life of a machine, there are difficulties in establishing when and how much is spent on repairs at different intervals of the machine life. For this reason, discrepancies occur when ridigly applying pre-determined repair rates to actual machines. For example, it is often the case that a machine is traded just before a major overhaul is necessary. If a repair rate were determined at this time from the beginning of the ownership period, it would be much lower than expected. Unless the dealer performs the overhaul and adds the costs to the price of the used unit, the result will be a value that is less than the value of a similar machine with fewer working hours(3).

(2) ASAE Farm Machinery Management Committee: Farm Machinery Costs and Use; p. 279-283; Agricultural Engineers Yearbook; American Society of Agricultural Engineers: St. Joseph, Michigan; 1970

Although there will always be difficulty in predicting repair costs for the many types and models of machines, a number of comprehensive research studies have been completed in the United States during the past decade which give guidelines for average rates and amounts spent on repairs. These studies involved collecting actual farm cost data on accumulated repairs and relating this to accumulated hours of use. Cost curves and equations were thus developed for many different types of machines. As expected, repair rates increased with use and age. Figure 2, reproduced from the "1970 Agricultural Engineers Yearbook", shows the curves and equations used in this study for repair and maintenance costs.

(3) For a discussion of "Field Machine Repair Patterns" refer to Puzey, George A. and Hunt, Donnell; AWAE annual Meeting, Paper No.66-673; December, 1966.

Figure 2 TOTAL ACCUMULATED REPAIR COSTS FOR FARM TRACTORS AND IMPLEMENTS



Source: 1970 Agricultural Engineers Yearbook.

T.A.R. = Total Accumulated Repairs.

(Calculations based on Weber, J.A. Tractor repair costs and comparison of diesel, gasoline, and LP-gas tractors. Agr. Eng. Res. Report PM-1, Dept. of Agr. Eng., Univ. of Ill., July 1966; and ASAE Data: ASAE D230, Farm Machinery Costs and Use, 1963 AGRICULTURAL ENGINEERS YEARBOOK, published iwth reference listing.)

Table 5 TOTAL ACCUMULATED REPAIRS FOR FARM TRACTORS & IMPLEMENTS

EQUATION	Estimated Wear-Out Life HRS.	T.A.R. %	MACHINE
No.1 T.A.R. = $0.120(X)^{1.5}$	12,000	120	Tractor
No.2 T.A.R. = $0.096(X)^{1.4}$	2,000	60	All-Terrain Vehicles Engine air-cooled Combine SP & PTO Combine Pick-up Mower attachment Motorcycle Rock Picker Rock Windrower Roto-Tiller Snow Blower Skid Steel Loaders 3-Wheel Bikes Snowmobile
No.3 T.A.R. = $0.096(X)^{1.4}$	2,500	60	Beet defoliator Cattle scale Cattle squeeze Ditcher Dozer blade Electric motor Generator Grain dryer Hydraulic tractor loader Land plane Manure spreaders Mixer mill Subsoiler Silage Wagon
No.4 T.A.R. = $0.096(X)^{1.4}$	20,000	60	Irrigation systems Packers Pipe trailer Main line Pumping units
No.5 T.A.R. = $0.127(X)^{1.4}$	2,000	80	Forage blower Forage blower-processor Forage chopper Forage harvester Grain boxes Post auger Post driver Potato piler Silage loader Corn Headers

TABLE 5 (cont'd)

EQUATION	Estimated Wear-Out Life HRS.	T.A.R. %	MACHINE
			Potato Scooper Potato seed cutter Rotary cutter Sprayer Delevan Kit
No.6 T.A.R. = $0.127(X)^{1.4}$	2,500	80	Baler Bale elevator Bale mover Bale wagon Beet harvester Beet top saver Beet thinner Forage box Grain augers Mixer feeder wagon Pneumatic Grain Mover Roller mill
No.7 T.A.R. = $0.159(X)^{1.4}$	2,000	100	Air Seeders Grain Drills
No.8 T.A.R. = $0.159(X)^{1.4}$	2,500	100	Bale stooker Hay stacker Mower Mower conditioner Rake Stack builder Stack feeder Stack mover Swather
No.9 T.A.R. = $0.159(X)^{1.4}$	5,000	100	Tilt box Wagon
No.10 T.A.R. = $0.191(X)^{1.4}$	1,200	120	Anhydrous Applicators Cold Flow Converter Dry fertilizer spreader Granular Herbicide Kit
No.11 T.A.R. = $0.191(X)^{1.4}$	10,000	120	Tub mill

TABLE 5 (CONT'D)

EQUATION	Estimated Wear-Out Life HRS.	T.A.R %	MACHINE
No.12 T.A.R. = $0.301(X)^{1.3}$	2,500	120	Chisel Plow Cultivator -Noble blade -row-crop -vibrashank Disc Discer Econorod Harrows Harrow Drawbar Packer Drawbar Planters-beet Corn planter Planters-potato Plow-Moldboard Pulvi-mulcher Ridger Rod Weeder Rotary tiller (Roto-Tiller) Stubble treader Tool bar
No.13 T.A.R. = $0.191(X)^{1.4}$	3,000	120	Garden Tractor Trucks
No.14 T.A.R. = $0.191(X)^{1.4}$	2,000	120	Potato Harvester
No.15 T.A.R. = $0.127(X)^{1.4}$	1,200	80	Truck hoist

X= % of Lifetime Hours

LABOUR COSTS

Labour should be considered when calculating field operating costs for custom rates or for comparing costs between large and small equipment. Hired labour is usually a variable cost as wages are paid on an hourly basis, but can be a fixed cost in instances where wages are paid on a monthly, or yearly basis. The owner-operator's labour can be valued at the rate which would be paid to the hired labour for doing the same work if there is no oppportunity to use his labour for non-farm employment.

SECTION II

OWNERSHIP AND OPERATING COSTS

PER HOUR

RETAIL PRICES OF FARM MACHINERY

IN ALBERTA, MARCH/1982

TABLE 6

TRACTORS

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/%	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/%	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
2 Wheel Drive Tractors - Diesel 1/																						
PTO-HP																						
20-29	9634	400		15	1.2	1.49	0.22	42	272	0.68	2.39	81	517	1.29	3842	576	1.44	0.02	32	0.08	2.84	5.23
30-39	12638	400		15	1.7	2.07	0.31	42	357	0.89	3.28	81	679	1.70	5040	756	1.89	0.03	32	0.08	3.70	6.98
40-49	17190	400		15	2.1	2.66	0.40	42	486	1.22	4.28	81	923	2.31	6855	1028	2.57	0.04	32	0.08	5.00	9.28
50-59	19654	500		15	2.6	3.26	0.49	59	777	1.55	5.31	81	1055	2.11	7838	1176	2.35	0.04	37	0.07	4.58	9.88
60-69	23748	500		15	3.1	3.85	0.58	59	939	1.88	6.30	81	1275	2.55	9471	1421	2.84	0.05	42	0.08	5.52	11.83
70-79	26633	600		15	3.6	4.45	0.67	78	1384	2.31	7.42	81	1430	2.38	10621	1593	2.66	0.05	42	0.07	5.15	12.58
80-89	36992	600		15	4.0	5.04	0.76	78	1922	3.20	9.00	81	1986	3.31	14752	2213	3.69	0.06	42	0.07	7.13	16.13
90-99	42779	700		15	4.5	5.63	0.84	98	2801	4.00	10.47	81	2297	3.28	17060	2559	3.66	0.06	42	0.06	7.06	17.53
100-119	49715	700		15	5.5	6.81	1.02	98	3255	4.65	12.48	81	2669	3.81	19826	2974	4.25	0.07	43	0.06	8.20	20.68
120-129	54573	800		15	5.9	7.41	1.11	120	4366	5.46	13.98	81	2930	3.66	21764	3265	4.08	0.07	48	0.06	7.87	21.86
130-139	58725	800		15	6.4	8.00	1.20	120	4698	5.87	15.07	81	3153	3.94	23420	3513	4.39	0.08	48	0.06	8.47	23.54
140-149	62378	800		15	6.9	8.59	1.29	120	4990	6.24	16.11	81	3349	4.19	24876	3731	4.66	0.08	48	0.06	8.99	25.11
150-159	65453	800		15	7.3	9.18	1.38	120	5236	6.55	17.10	81	3514	4.39	26103	3915	4.89	0.08	48	0.06	9.43	26.53
160-179	72222	800		15	7.8	9.78	1.47	120	5778	7.22	18.46	81	3877	4.85	28802	4320	5.40	0.09	48	0.06	10.40	28.86
180-190	77675	800		15	8.8	10.96	1.64	120	6214	7.77	20.37	81	4170	5.21	30977	4647	5.81	0.10	48	0.06	11.18	31.56

1/ Equipped with standard transmission, Swinging drawbar, Independent dual range PTO, 75% fluid

Above 40HP with 3 point hitch, differential lock, power steering; Above 60HP 1 remote hydraulic

Above 80HP cab with heat; Above 100HP dual remote hydraulic, turbocharged

Above 120HP cab with heat & air-conditioning; Above 160HP dual rear tires

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
2 Wheel Drive Tractors - Front Wheel Assist - Diesel																						
PTO-HP																						
20-29	12208	400		15	1.2	1.49	0.22	42	345	0.86	2.57	81	655	1.64	4869	730	1.83	0.03	32	0.08	3.57	6.15
30-39	13353	400		15	1.7	2.07	0.31	42	378	0.94	3.33	81	717	1.79	5325	799	2.00	0.03	32	0.08	3.90	7.23
40-49	22622	400		15	2.1	2.66	0.40	42	640	1.60	4.66	81	1215	3.04	9022	1353	3.38	0.06	32	0.08	6.56	11.22
50-59	28813	500		15	2.6	3.26	0.49	59	1139	2.28	6.03	81	1547	3.09	11491	1724	3.45	0.06	37	0.07	6.67	12.70
60-69	30398	500		15	3.1	3.85	0.58	59	1202	2.40	6.83	81	1632	3.26	12123	1818	3.64	0.06	42	0.08	7.05	13.88
70-79	32502	600		15	3.6	4.45	0.67	78	1689	2.81	7.93	81	1745	2.91	12962	1944	3.24	0.06	42	0.07	6.27	14.21
80-89	44564	600		15	4.0	5.04	0.76	78	2316	3.86	9.65	81	2393	3.99	17772	2666	4.44	0.08	42	0.07	8.58	18.23
90-99	49674	600		15	4.5	5.63	0.84	78	2581	4.30	10.77	81	2667	4.44	19810	2971	4.95	0.09	42	0.07	9.55	20.32
100-119	59120	700		15	5.5	6.81	1.02	98	3871	5.53	13.36	81	3174	4.53	23577	3537	5.05	0.09	43	0.06	9.74	23.10
120-129	65304	800		15	5.9	7.41	1.11	120	5224	6.53	15.05	81	3506	4.38	26043	3906	4.88	0.08	48	0.06	9.41	24.47
130-139	67917	800		15	6.4	8.00	1.20	120	5433	6.79	15.99	81	3646	4.56	27085	4063	5.08	0.09	48	0.06	9.78	25.78
140-149	69205	800		15	6.9	8.59	1.29	120	5536	6.92	16.80	81	3715	4.64	27599	4140	5.17	0.09	48	0.06	9.97	26.77
150-159	78117	800		15	7.4	9.19	1.38	120	6249	7.81	18.38	81	4194	5.24	31153	4673	5.84	0.10	48	0.06	11.25	29.62
160-180	84083	800		15	8.1	10.08	1.51	120	6727	8.41	19.99	81	4514	5.64	33532	5030	6.29	0.11	48	0.06	12.10	32.09

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
4 Wheel Drive Tractors - Diesel																						
Engine HP																						
70	42900	800		15	3.3	4.15	0.62	120	3432	4.29	9.06	81	2303	2.88	17109	2566	3.21	0.06	58	0.07	6.22	15.28
160-175	74658	800		15	7.9	9.92	1.49	120	5973	7.47	18.88	81	4008	5.01	29774	4466	5.58	0.10	58	0.07	10.76	29.64
176-214	84276	800		15	9.2	11.55	1.73	120	6742	8.43	21.71	81	4525	5.66	33609	5041	6.30	0.11	58	0.07	12.14	33.85
215-239	87579	800		15	10.8	13.45	2.02	120	7006	8.76	24.23	81	4702	5.88	34927	5239	6.55	0.11	60	0.07	12.61	36.84
240-260	100100	800		15	11.9	14.81	2.22	120	8008	10.01	27.04	81	5374	6.72	39920	5988	7.48	0.13	62	0.08	14.41	41.45
261-280	104296	800		15	12.8	16.03	2.40	120	8344	10.43	28.86	81	5599	7.00	41593	6239	7.80	0.14	67	0.08	15.02	43.87
281-300	108066	800		15	13.8	17.21	2.58	120	8645	10.81	30.60	81	5802	7.25	43097	6465	8.08	0.14	67	0.08	15.56	46.16
301-350	111384	800		15	15.4	19.28	2.89	120	8911	11.14	33.30	81	5980	7.47	44420	6663	8.33	0.14	70	0.09	16.04	49.34
351-470	147644	800		15	19.5	24.33	3.65	120	11812	14.76	42.74	81	7927	9.91	58880	8832	11.04	0.19	77	0.10	21.24	63.97
Garden Tractors - Gasoline																						
Geared Transmission																						
Engine HP																						
8	2680	200		12	0.6	0.76	0.11	88	197	0.98	1.85	75	167	0.84	1069	160	0.80	0.01	8	0.04	1.69	3.55
10	3538	200		12	0.7	0.95	0.14	88	260	1.30	2.39	75	221	1.11	1411	212	1.06	0.02	8	0.04	2.22	4.61
12	4017	200		12	0.9	1.14	0.17	88	295	1.48	2.79	75	251	1.26	1602	240	1.20	0.02	12	0.06	2.54	5.32
14	4245	200		12	1.0	1.33	0.20	88	312	1.56	3.09	75	265	1.33	1693	254	1.27	0.02	12	0.06	2.68	5.77
16	4455	200		12	1.2	1.52	0.23	88	327	1.64	3.39	75	278	1.39	1777	266	1.33	0.02	19	0.09	2.84	6.23

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Hydrostatic Transmission - One cylinder																						
Engine HP																						
12	4097	200		12	0.9	1.14	0.17	88	301	1.51	2.82	75	256	1.28	1634	245	1.23	0.02	12	0.06	2.58	5.40
14	4897	200		12	1.0	1.33	0.20	88	360	1.80	3.33	75	306	1.53	1953	293	1.46	0.03	12	0.06	3.08	6.41
16	5146	200		12	1.2	1.52	0.23	88	378	1.89	3.64	75	322	1.61	2052	308	1.54	0.03	19	0.09	3.27	6.91
Hydrostatic Transmission - Twin cylinder																						
Engine HP																						
17	5635	200		12	1.3	1.60	0.24	88	414	2.07	3.91	75	352	1.76	2247	337	1.69	0.03	19	0.09	3.57	7.48
18	5909	200		12	1.3	1.70	0.26	88	434	2.17	4.13	75	369	1.85	2357	353	1.77	0.03	19	0.09	3.74	7.87
20	7782	200		12	1.5	1.89	0.28	88	572	2.86	5.04	75	486	2.43	3103	466	2.33	0.04	19	0.09	4.89	9.93
4 Wheel Drive - Diesel																						
Engine HP																						
15	6870	200		12	1.1	1.42	0.21	88	505	2.52	4.16	75	429	2.15	2740	411	2.05	0.04	19	0.09	4.33	8.49
18	8579	200		12	1.3	1.70	0.26	88	630	3.15	5.11	75	536	2.68	3421	513	2.57	0.04	19	0.09	5.38	10.49
22-25	10717	200		12	1.7	2.23	0.33	88	788	3.94	6.50	75	670	3.35	4274	641	3.21	0.06	19	0.09	6.70	13.20
27-38	14855	200		12	2.4	3.08	0.46	88	1092	5.46	9.01	75	928	4.64	5924	889	4.44	0.08	19	0.09	9.26	18.26

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Garden Tractor Attachments																						
Mower																						
30 "	564	75		12	0.0	0.00	0.03	20	9	0.12	0.15	86	40	0.54	81	12	0.16	0.00	8	0.11	0.82	0.97
42 "	710	75		12	0.0	0.00	0.03	20	12	0.16	0.19	86	51	0.68	102	15	0.20	0.00	8	0.11	1.00	1.18
48 "	805	75		12	0.0	0.00	0.03	20	13	0.18	0.21	86	58	0.77	116	17	0.23	0.00	8	0.11	1.12	1.32
60 "	1307	75		12	0.0	0.00	0.03	20	22	0.29	0.32	86	94	1.25	188	28	0.38	0.01	8	0.11	1.74	2.06
Roto Tiller																						
30 "	870	75		12	0.0	0.00	0.03	20	14	0.19	0.22	86	62	0.83	251	38	0.50	0.01	8	0.11	1.45	1.68
31 "	953	75		12	0.0	0.00	0.03	20	16	0.21	0.24	86	68	0.91	275	41	0.55	0.01	8	0.11	1.58	1.82
33 "	1080	75		12	0.0	0.00	0.03	20	18	0.24	0.27	86	78	1.03	312	47	0.62	0.01	8	0.11	1.78	2.05
35 "	1220	75		12	0.0	0.00	0.03	20	20	0.27	0.30	86	88	1.17	352	53	0.70	0.01	8	0.11	2.00	2.29
48 "	1511	75		12	0.0	0.00	0.03	20	25	0.33	0.36	86	108	1.45	436	65	0.87	0.02	8	0.11	2.45	2.81
Snowblower																						
32 "	672	75		12	0.0	0.00	0.03	20	11	0.15	0.18	86	48	0.64	194	29	0.39	0.01	8	0.11	1.15	1.33
36 "	838	75		12	0.0	0.00	0.03	20	14	0.18	0.21	86	60	0.80	242	36	0.48	0.01	8	0.11	1.41	1.62
46 "	1059	75		12	0.0	0.00	0.03	20	17	0.23	0.26	86	76	1.01	306	46	0.61	0.01	8	0.11	1.75	2.01

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS •/•	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION •/•	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
TILLAGE EQUIPMENT																						
Noble Blade																						
6' blades																						
18'	5268	160	1250	15	0.0	0.00	0.04	114	399	2.49	2.53	90	317	1.98	1521	228	1.43	0.02	83	0.52	3.95	6.49
24'	7823	160	1680	15	0.0	0.00	0.04	114	593	3.70	3.74	90	471	2.95	2259	339	2.12	0.04	90	0.56	5.66	9.41
30'	10748	160	2100	15	0.0	0.00	0.05	114	814	5.09	5.14	90	648	4.05	3104	466	2.91	0.05	90	0.56	7.57	12.71
42'	15659	160	2830	15	0.0	0.00	0.05	114	1186	7.41	7.46	90	944	5.90	4522	678	4.24	0.07	90	0.56	10.77	18.24
54'	20733	160	3620	15	0.0	0.00	0.05	114	1571	9.82	9.87	90	1249	7.81	5988	898	5.61	0.10	90	0.56	14.08	23.95
7' blades																						
21'	5509	160	1470	15	0.0	0.00	0.04	114	417	2.61	2.65	90	332	2.08	1591	239	1.49	0.03	83	0.52	4.11	6.76
28'	8244	160	1950	15	0.0	0.00	0.05	114	625	3.90	3.95	90	497	3.11	2381	357	2.23	0.04	90	0.56	5.94	9.89
35'	10528	160	2440	15	0.0	0.00	0.05	114	798	4.98	5.03	90	634	3.97	3040	456	2.85	0.05	90	0.56	7.43	12.46
49'	16196	160	3420	15	0.0	0.00	0.05	114	1227	7.67	7.72	90	976	6.10	4677	702	4.39	0.08	90	0.56	11.12	18.84
Stubble Treader																						
5'	674	160	416	15	0.0	0.00	0.03	78	35	0.22	0.25	90	41	0.25	97	15	0.09	0.00	4	0.02	0.37	0.62
6'	725	160	416	15	0.0	0.00	0.03	78	38	0.24	0.27	90	44	0.27	104	16	0.10	0.00	4	0.03	0.40	0.67
7'	752	160	416	15	0.0	0.00	0.03	78	39	0.24	0.27	90	45	0.28	108	16	0.10	0.00	5	0.03	0.42	0.69

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL/HR	FUEL $/HR	LUBE $/HR	REPAIRS %/*	REPAIRS $/YR	REPAIRS $/HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/*	DEPRECIATION $/YR	DEPRECIATION $/HR	INTEREST AVE VALUE	INTEREST $/YR	INTEREST $/HR	INS $/HR	HOUSING $/YR	HOUSING $/HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Econorod																						
6 '	120	160	100	15	0.0	0.00		114	9	0.06	0.06	90	7	0.05	35	5	0.03	0.00	1	0.00	0.08	0.14
7 '	123	160	100	15	0.0	0.00		114	9	0.06	0.06	90	7	0.05	36	5	0.03	0.00	1	0.00	0.08	0.14
8 '	126	160	100	15	0.0	0.00		114	10	0.06	0.06	90	8	0.05	36	5	0.03	0.00	1	0.00	0.09	0.15
Chisel Plow 4 x 4 tube frame, 16" sweeps, spring reset																						
Rigid																						
7 '	2928	160	430	15	0.0	0.00	0.03	114	222	1.39	1.42	90	176	1.10	846	127	0.79	0.01	40	0.25	2.16	3.58
10 '	3733	160	620	15	0.0	0.00	0.03	114	283	1.77	1.80	90	225	1.41	1078	162	1.01	0.02	57	0.36	2.79	4.59
11 '	4000	160	680	15	0.0	0.00	0.03	114	303	1.89	1.92	90	241	1.51	1155	173	1.08	0.02	63	0.39	3.00	4.93
12 '	4380	160	740	15	0.0	0.00	0.03	114	332	2.07	2.10	90	264	1.65	1265	190	1.19	0.02	68	0.42	3.28	5.39
13 '	4943	160	810	15	0.0	0.00	0.03	114	374	2.34	2.37	90	298	1.86	1428	214	1.34	0.02	73	0.46	3.68	6.05
14 '	5087	160	870	15	0.0	0.00	0.03	114	385	2.41	2.44	90	307	1.92	1469	220	1.38	0.02	78	0.49	3.80	6.24
15 '	5450	160	930	15	0.0	0.00	0.03	114	413	2.58	2.61	90	328	2.05	1574	236	1.48	0.03	78	0.49	4.04	6.65
16 '	5690	160	990	15	0.0	0.00	0.03	114	431	2.69	2.72	90	343	2.14	1643	246	1.54	0.03	78	0.49	4.20	6.92
17 '	5889	160	1050	15	0.0	0.00	0.03	114	446	2.79	2.82	90	355	2.22	1701	255	1.59	0.03	83	0.52	4.36	7.18

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Folding Wing																						
19'	6615	160	990	15	0.0	0.00	0.03	114	501	3.13	3.16	90	399	2.49	1910	287	1.79	0.03	78	0.49	4.80	7.96
20'	7580	160	1180	15	0.0	0.00	0.03	114	574	3.59	3.62	90	457	2.86	2189	328	2.05	0.04	78	0.49	5.43	9.05
21'	9461	160	1240	15	0.0	0.00	0.03	114	717	4.48	4.51	90	570	3.56	2732	410	2.56	0.04	83	0.52	6.69	11.20
22'	10360	160	1300	15	0.0	0.00	0.03	114	785	4.91	4.94	90	624	3.90	2992	449	2.80	0.05	83	0.52	7.27	12.21
23'	10885	160	1360	15	0.0	0.00	0.03	114	825	5.15	5.18	90	656	4.10	3144	472	2.95	0.05	83	0.52	7.62	12.80
24'	11297	160	1430	15	0.0	0.00	0.03	114	856	5.35	5.38	90	681	4.26	3263	489	3.06	0.05	83	0.52	7.89	13.26
25'	11916	160	1490	15	0.0	0.00	0.04	114	903	5.64	5.68	90	718	4.49	3441	516	3.23	0.06	83	0.52	8.29	13.97
26'	12171	160	1550	15	0.0	0.00	0.04	114	922	5.76	5.80	90	734	4.58	3515	527	3.30	0.06	83	0.52	8.46	14.26
27'	12277	160	1610	15	0.0	0.00	0.04	114	930	5.81	5.85	90	740	4.62	3546	532	3.32	0.06	83	0.52	8.5[illegible]	14.38
28'	12915	160	1670	15	0.0	0.00	0.04	114	978	6.12	6.16	90	778	4.86	3730	559	3.50	0.06	83	0.52	8.94	15.10
29'	13466	160	1740	15	0.0	0.00	0.04	114	1020	6.38	6.42	90	812	5.07	3889	583	3.65	0.06	83	0.52	9.30	15.72
30'	13823	160	1800	15	0.0	0.00	0.04	114	1047	6.55	6.59	90	833	5.21	3992	599	3.74	0.06	83	0.52	9.53	16.12
31'	14444	160	1860	15	0.0	0.00	0.04	114	1094	6.84	6.88	90	870	5.44	4171	626	3.91	0.07	83	0.52	9.94	16.82
32'	14760	160	1920	15	0.0	0.00	0.04	114	1118	6.99	7.03	90	890	5.56	4263	639	4.00	0.07	83	0.52	10.14	17.17
33'	15001	160	1980	15	0.0	0.00	0.04	114	1136	7.10	7.14	90	904	5.65	4332	650	4.06	0.07	83	0.52	10.30	17.44
34'	15875	160	2050	15	0.0	0.00	0.04	114	1203	7.52	7.56	90	957	5.98	4585	688	4.30	0.07	83	0.52	10.87	18.43
35'	16295	160	2170	15	0.0	0.00	0.04	114	1234	7.72	7.76	90	982	6.14	4706	706	4.41	0.08	83	0.52	11.14	18.90
36'	16720	160	2230	15	0.0	0.00	0.04	114	1267	7.92	7.96	90	1008	6.30	4829	724	4.53	0.08	83	0.52	11.42	19.38
37'	17485	160	2290	15	0.0	0.00	0.04	114	1325	8.28	8.32	90	1054	6.59	5050	757	4.73	0.08	83	0.52	11.92	20.24

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
39 '	18513	160	2420	15	0.0	0.00	0.05	114	1403	8.77	8.82	90	1116	6.97	5347	802	5.01	0.09	83	0.52	12.59	21.41
40 '	19781	160	2480	15	0.0	0.00	0.05	114	1499	9.37	9.42	90	1192	7.45	5713	857	5.36	0.09	83	0.52	13.42	22.83
41 '	20308	160	2540	15	0.0	0.00	0.05	114	1538	9.62	9.67	90	1224	7.65	5865	880	5.50	0.10	83	0.52	13.76	23.43
43 '	20999	160	2670	15	0.0	0.00	0.05	114	1591	9.94	9.99	90	1266	7.91	6065	910	5.69	0.10	83	0.52	14.21	24.21
45 '	21540	160	2790	15	0.0	0.00	0.05	114	1632	10.20	10.25	90	1298	8.11	6221	933	5.83	0.10	83	0.52	14.57	24.81
46 '	22100	160	2850	15	0.0	0.00	0.05	114	1674	10.46	10.51	90	1332	8.32	6382	957	5.98	0.10	83	0.52	14.93	25.44
47 '	22855	160	2910	15	0.0	0.00	0.05	114	1731	10.82	10.87	90	1377	8.61	6601	990	6.19	0.11	83	0.52	15.42	26.29
52 '	23010	160	3220	15	0.0	0.00	0.05	114	1743	10.89	10.94	90	1387	8.67	6645	997	6.23	0.11	83	0.52	15.52	26.47
58 '	25357	160	3480	15	0.0	0.00	0.05	114	1921	12.01	12.06	90	1528	9.55	7323	1098	6.87	0.12	83	0.52	17.05	29.11
60 '	25882	160	3720	15	0.0	0.00	0.05	114	1961	12.25	12.30	90	1560	9.75	7475	1121	7.01	0.12	83	0.52	17.40	29.70

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Field Cultivator																						
3 x 3 square tube frame, auto trip, 9" sweep																						
Rigid																						
10 '	3050	160	890	15	0.0	0.00	0.03	114	231	1.44	1.47	90	184	1.15	881	132	0.83	0.01	58	0.36	2.35	3.83
12 '	3397	160	1070	15	0.0	0.00	0.03	114	257	1.61	1.64	90	205	1.28	981	147	0.92	0.02	58	0.36	2.58	4.22
13 '	4240	160	1160	15	0.0	0.00	0.03	114	321	2.01	2.04	90	256	1.60	1225	184	1.15	0.02	59	0.37	3.13	5.17
14 '	4730	160	1250	15	0.0	0.00	0.03	114	358	2.24	2.27	90	285	1.78	1366	205	1.28	0.02	60	0.38	3.46	5.73
15 '	5150	160	1340	15	0.0	0.00	0.03	114	390	2.44	2.47	90	310	1.94	1487	223	1.39	0.02	61	0.38	3.74	6.21
16 '	5365	160	1420	15	0.0	0.00	0.04	114	406	2.54	2.58	90	323	2.02	1549	232	1.45	0.03	62	0.39	3.89	6.47
17 '	5540	160	1510	15	0.0	0.00	0.04	114	420	2.62	2.66	90	334	2.09	1600	240	1.50	0.03	63	0.39	4.01	6.67
18 '	5740	160	1602	15	0.0	0.00	0.04	114	435	2.72	2.76	90	346	2.16	1658	249	1.55	0.03	64	0.40	4.14	6.90
20 '	6000	160	1780	15	0.0	0.00	0.04	114	455	2.84	2.88	90	362	2.26	1733	260	1.62	0.03	65	0.41	4.32	7.20
Folding Wing																						
19 '	6482	160	1630	15	0.0	0.00	0.03	114	491	3.07	3.10	90	391	2.44	1872	281	1.76	0.03	78	0.49	4.71	7.81
20 '	7180	160	1720	15	0.0	0.00	0.03	114	544	3.40	3.43	90	433	2.70	2074	311	1.94	0.03	78	0.49	5.17	8.60
21 '	7240	160	1810	15	0.0	0.00	0.04	114	548	3.43	3.47	90	436	2.73	2091	314	1.96	0.03	83	0.52	5.24	8.71
22 '	7545	160	1890	15	0.0	0.00	0.04	114	572	3.57	3.61	90	455	2.84	2179	327	2.04	0.04	83	0.52	5.44	9.05
23 '	8953	160	1980	15	0.0	0.00	0.04	114	678	4.24	4.28	90	540	3.37	2586	388	2.42	0.04	83	0.52	6.36	10.64
24 '	9936	160	2060	15	0.0	0.00	0.04	114	753	4.70	4.74	90	599	3.74	2870	430	2.69	0.05	83	0.52	7.00	11.74
25 '	10570	160	2150	15	0.0	0.00	0.04	114	801	5.00	5.04	90	637	3.98	3053	458	2.86	0.05	88	0.55	7.44	12.49

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
26 '	10690	160	2240	15	0.0	0.00	0.05	114	810	5.06	5.11	90	644	4.03	3087	463	2.89	0.05	83	0.52	7.49	12.60
27 '	11890	160	2320	15	0.0	0.00	0.05	114	901	5.63	5.68	90	717	4.48	3434	515	3.22	0.06	83	0.52	8.27	13.95
28 '	12117	160	2410	15	0.0	0.00	0.05	114	918	5.74	5.79	90	730	4.56	3499	525	3.28	0.06	83	0.52	8.42	14.21
29 '	13500	160	2490	15	0.0	0.00	0.05	114	1023	6.39	6.44	90	814	5.08	3899	585	3.66	0.06	83	0.52	9.32	15.76
30 '	13865	160	2580	15	0.0	0.00	0.05	114	1050	6.56	6.61	90	836	5.22	4004	601	3.75	0.07	83	0.52	9.56	16.18
31 '	14001	160	2670	15	0.0	0.00	0.05	114	1061	6.63	6.68	90	844	5.27	4043	607	3.79	0.07	83	0.52	9.65	16.33
32 '	14510	160	2750	15	0.0	0.00	0.05	114	1099	6.87	6.92	90	874	5.47	4190	629	3.93	0.07	83	0.52	9.98	16.90
33 '	14923	160	2840	15	0.0	0.00	0.05	114	1131	7.07	7.12	90	899	5.62	4310	646	4.04	0.07	83	0.52	10.25	17.37
34 '	15430	160	2920	15	0.0	0.00	0.05	114	1169	7.31	7.36	90	930	5.81	4456	668	4.18	0.07	83	0.52	10.58	17.94
35 '	16113	160	3010	15	0.0	0.00	0.05	114	1221	7.63	7.68	90	971	6.07	4653	698	4.36	0.08	83	0.52	11.03	18.71
36 '	16615	160	3100	15	0.0	0.00	0.05	114	1259	7.87	7.92	90	1001	6.26	4798	720	4.50	0.08	83	0.52	11.35	19.27
37 '	16986	160	3180	15	0.0	0.00	0.05	114	1287	8.04	8.09	90	1024	6.40	4906	736	4.60	0.08	83	0.52	11.60	19.69
38 '	17190	160	3270	15	0.0	0.00	0.05	114	1302	8.14	8.19	90	1036	6.47	4964	745	4.65	0.08	83	0.52	11.73	19.92
41 '	17370	160	3530	15	0.0	0.00	0.05	114	1316	8.22	8.27	90	1047	6.54	5016	752	4.70	0.08	83	0.52	11.85	20.12
42 '	17555	160	3612	15	0.0	0.00	0.05	114	1330	8.31	8.36	90	1058	6.61	5070	760	4.75	0.08	83	0.52	11.97	20.33
43 '	18355	160	3700	15	0.0	0.00	0.05	114	1391	8.69	8.74	90	1106	6.91	5301	795	4.97	0.09	83	0.52	12.49	21.23
48 '	19462	160	4130	15	0.0	0.00	0.05	114	1474	9.21	9.26	90	1173	7.33	5621	843	5.27	0.09	83	0.52	13.21	22.48
49 '	22132	160	4210	15	0.0	0.00	0.05	114	1677	10.48	10.53	90	1334	8.34	6392	959	5.99	0.10	83	0.52	14.95	25.48
55 '	31765	160	4730	15	0.0	0.00	0.05	114	2406	15.04	15.09	90	1914	11.96	9174	1376	8.60	0.15	83	0.52	21.23	36.32
60 '	32750	160	5160	15	0.0	0.00	0.05	114	2481	15.51	15.56	90	1974	12.34	9458	1419	8.87	0.15	83	0.52	21.88	37.43
61 '	34009	160	5250	15	0.0	0.00	0.05	114	2576	16.10	16.15	90	2050	12.81	9822	1473	9.21	0.16	83	0.52	22.70	38.85

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Field Cultivator																						
4 x 4 tube frame, auto trip, 9" sweep																						
Rigid - 2 wheel																						
11 '	3045	160	980	15	0.0	0.00	0.03	114	231	1.44	1.47	90	184	1.15	879	132	0.82	0.01	64	0.40	2.39	3.86
13 '	3320	160	1160	15	0.0	0.00	0.03	114	252	1.57	1.60	90	200	1.25	959	144	0.90	0.02	74	0.46	2.63	4.23
15 '	3660	160	1340	15	0.0	0.00	0.03	114	277	1.73	1.76	90	221	1.38	1057	159	0.99	0.02	84	0.53	2.91	4.67
17 '	4025	160	1510	15	0.0	0.00	0.03	114	305	1.91	1.94	90	243	1.52	1162	174	1.09	0.02	84	0.53	3.15	5.09
Single Wing - 3 wheel																						
17 '	5410	160	1510	15	0.0	0.00	0.03	114	410	2.56	2.59	90	326	2.04	1562	234	1.46	0.03	84	0.53	4.05	6.64
19 '	5685	160	1690	15	0.0	0.00	0.03	114	431	2.69	2.72	90	343	2.14	1642	246	1.54	0.03	84	0.53	4.23	6.95
21 '	6025	160	1870	15	0.0	0.00	0.04	114	456	2.85	2.89	90	363	2.27	1740	261	1.63	0.03	84	0.53	4.45	7.35
24 '	6390	160	2140	15	0.0	0.00	0.04	114	484	3.03	3.07	90	385	2.41	1845	277	1.73	0.03	84	0.53	4.69	7.76
Double Wing - 4 wheel																						
24 '	7615	160	2140	15	0.0	0.00	0.04	114	577	3.61	3.65	90	459	2.87	2199	330	2.06	0.04	84	0.53	5.49	9.14
26 '	7890	160	2240	15	0.0	0.00	0.04	114	598	3.74	3.78	90	476	2.97	2279	342	2.14	0.04	89	0.56	5.70	9.48
28 '	8230	160	2410	15	0.0	0.00	0.04	114	623	3.90	3.94	90	496	3.10	2377	357	2.23	0.04	89	0.56	5.92	9.86
30 '	8595	160	2580	15	0.0	0.00	0.04	114	651	4.07	4.11	90	518	3.24	2482	372	2.33	0.04	89	0.56	6.16	10.27

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE		EST LIFE	VARIABLE COSTS							FIXED COSTS										TOTAL COSTS
					FUEL		LUBE	REPAIRS			TOTAL	DEPRECIATION			INTEREST			INS	HOUSING		TOTAL	
		HRS	ACRES	YRS	GAL /HR	$/ HR	$/ HR	°/°	$/ YR	$/ HR	PER HOUR	°/°	$/ YR	$/ HR	AVE VALUE	$/ YR	$/ HR	$/ HR	$/ YR	$/ HR	PER HOUR	PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Double Wing - Duals 6 wheel																						
24 '	8355	160	2140	15	0.0	0.00	0.04	114	633	3.96	4.00	90	504	3.15	2413	362	2.26	0.04	89	0.56	6.00	10.00
26 '	8630	160	2240	15	0.0	0.00	0.04	114	654	4.09	4.13	90	520	3.25	2492	374	2.34	0.04	89	0.56	6.18	10.31
28 '	8970	160	2410	15	0.0	0.00	0.04	114	680	4.25	4.29	90	541	3.38	2591	389	2.43	0.04	89	0.56	6.41	10.69
30 '	9335	160	2580	15	0.0	0.00	0.04	114	707	4.42	4.46	90	563	3.52	2696	404	2.53	0.04	89	0.56	6.64	11.10
31 '	10070	160	2670	15	0.0	0.00	0.04	114	763	4.77	4.81	90	607	3.79	2908	436	2.73	0.05	89	0.56	7.12	11.93
33 '	10345	160	2840	15	0.0	0.00	0.04	114	784	4.90	4.94	90	623	3.90	2988	448	2.80	0.05	89	0.56	7.30	12.24
35 '	10685	160	3010	15	0.0	0.00	0.04	114	809	5.06	5.10	90	644	4.02	3086	463	2.89	0.05	89	0.56	7.52	12.62
37 '	11050	160	3180	15	0.0	0.00	0.04	114	837	5.23	5.27	90	666	4.16	3191	479	2.99	0.05	89	0.56	7.76	13.03
Double Wing - Duals 8 wheel																						
31 '	10815	160	2670	15	0.0	0.00	0.04	114	819	5.12	5.16	90	652	4.07	3127	469	2.93	0.05	89	0.56	7.61	12.77
33 '	11090	160	2840	15	0.0	0.00	0.04	114	840	5.25	5.29	90	668	4.18	3203	480	3.00	0.05	89	0.56	7.79	13.08
35 '	11430	160	3010	15	0.0	0.00	0.04	114	866	5.41	5.45	90	689	4.31	3301	495	3.09	0.05	89	0.56	8.01	13.46
37 '	11795	160	3180	15	0.0	0.00	0.04	114	894	5.58	5.62	90	711	4.44	3406	511	3.19	0.06	89	0.56	8.25	13.87
41 '	14280	160	3530	15	0.0	0.00	0.05	114	1082	6.76	6.81	90	861	5.38	4124	619	3.87	0.07	89	0.56	9.87	16.68
43 '	14555	160	3700	15	0.0	0.00	0.05	114	1103	6.89	6.94	90	877	5.48	4203	631	3.94	0.07	89	0.56	10.05	16.99
45 '	14895	160	3870	15	0.0	0.00	0.05	114	1128	7.05	7.10	90	898	5.61	4302	645	4.03	0.07	89	0.56	10.27	17.37
47 '	15260	160	4042	15	0.0	0.00	0.05	114	1156	7.23	7.28	90	920	5.75	4407	661	4.13	0.07	89	0.56	10.51	17.78

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Double Wing - Duals 10 wheel																						
47 '	17135	160	4042	15	0.0	0.00	0.05	114	1298	8.11	8.16	90	1033	6.45	4949	742	4.64	0.08	89	0.56	11.73	19.89
49 '	17410	160	4212	15	0.0	0.00	0.05	114	1319	8.24	8.29	90	1049	6.56	5028	754	4.71	0.08	89	0.56	11.91	20.20
53 '	18855	160	4382	15	0.0	0.00	0.05	114	1428	8.93	8.98	90	1136	7.10	5445	817	5.10	0.09	89	0.56	12.85	21.83
55 '	19130	160	4552	15	0.0	0.00	0.05	114	1449	9.06	9.11	90	1153	7.21	5525	829	5.18	0.09	89	0.56	13.03	22.14
Vibrashank Cultivator																						
2½ x 2½ square tube frame, 9" shovel																						
Rigid																						
13 '	3769	160	1160	15	0.0	0.00	0.03	114	286	1.78	1.81	90	227	1.42	1088	163	1.02	0.02	74	0.46	2.92	4.73
14 '	3966	160	1250	15	0.0	0.00	0.03	114	300	1.88	1.91	90	239	1.49	1145	172	1.07	0.02	79	0.49	3.08	4.99
15 '	4172	160	1340	15	0.0	0.00	0.03	114	316	1.98	2.01	90	251	1.57	1205	181	1.13	0.02	86	0.54	3.26	5.26
16 '	4559	160	1420	15	0.0	0.00	0.03	114	345	2.16	2.19	90	275	1.72	1317	197	1.23	0.02	91	0.57	3.54	5.73
17 '	4716	160	1510	15	0.0	0.00	0.03	114	357	2.23	2.26	90	284	1.78	1362	204	1.28	0.02	96	0.60	3.68	5.94
18 '	4914	160	1600	15	0.0	0.00	0.03	114	372	2.33	2.36	90	296	1.85	1419	213	1.33	0.02	103	0.64	3.85	6.20
20 '	5382	160	1780	15	0.0	0.00	0.03	114	408	2.55	2.58	90	324	2.03	1554	233	1.46	0.03	113	0.71	4.22	6.79
Folding Wing - 3 x 3 square tube frame																						
22 '	10628	160	1890	15	0.0	0.00	0.04	114	805	5.03	5.07	90	641	4.00	3069	460	2.88	0.05	78	0.49	7.42	12.49
23 '	10967	160	1980	15	0.0	0.00	0.04	114	831	5.19	5.23	90	661	4.13	3167	475	2.97	0.05	81	0.51	7.66	12.89
24 '	11308	160	2060	15	0.0	0.00	0.04	114	857	5.35	5.39	90	681	4.26	3266	490	3.06	0.05	84	0.53	7.90	13.29
25 '	11716	160	2150	15	0.0	0.00	0.04	114	888	5.55	5.59	90	706	4.41	3384	508	3.17	0.05	86	0.54	8.18	13.76

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL/HR	FUEL $/HR	LUBE $/HR	REPAIRS %/*	REPAIRS $/YR	REPAIRS $/HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/*	DEPRECIATION $/YR	DEPRECIATION $/HR	INTEREST AVE VALUE	INTEREST $/YR	INTEREST $/HR	INS $/HR	HOUSING $/YR	HOUSING $/HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
26 '	12055	160	2240	15	0.0	0.00	0.04	114	913	5.71	5.75	90	727	4.54	3481	522	3.26	0.06	84	0.53	8.39	14.13
28 '	12637	160	2410	15	0.0	0.00	0.04	114	957	5.98	6.02	90	762	4.76	3650	547	3.42	0.06	84	0.53	8.77	14.79
30 '	13342	160	2580	15	0.0	0.00	0.04	114	1011	6.32	6.36	90	804	5.03	3853	578	3.61	0.06	84	0.53	9.23	15.58
32 '	14032	160	2750	15	0.0	0.00	0.04	114	1063	6.64	6.68	90	846	5.29	4052	608	3.80	0.07	84	0.53	9.68	16.36
33 '	14361	160	2840	15	0.0	0.00	0.04	114	1088	6.80	6.84	90	865	5.41	4147	622	3.89	0.07	84	0.53	9.89	16.73
34 '	14640	160	2920	15	0.0	0.00	0.04	114	1109	6.93	6.97	90	882	5.51	4228	634	3.96	0.07	84	0.53	10.07	17.04
35 '	14844	160	3010	15	0.0	0.00	0.04	114	1125	7.03	7.07	90	895	5.59	4287	643	4.02	0.07	84	0.53	10.20	17.27
37 '	15383	160	3180	15	0.0	0.00	0.04	114	1165	7.28	7.32	90	927	5.79	4443	666	4.16	0.07	84	0.53	10.56	17.88
38 '	15704	160	3270	15	0.0	0.00	0.04	114	1190	7.44	7.48	90	946	5.92	4535	680	4.25	0.07	84	0.53	10.77	18.24
40 '	16370	160	3440	15	0.0	0.00	0.04	114	1240	7.75	7.79	90	987	6.17	4728	709	4.43	0.08	84	0.53	11.20	18.99
42 '	18260	160	3610	15	0.0	0.00	0.04	114	1383	8.65	8.69	90	1100	6.88	5273	791	4.94	0.09	84	0.53	12.43	21.12
44 '	21773	160	3780	15	0.0	0.00	0.04	114	1649	10.31	10.35	90	1312	8.20	6288	943	5.90	0.10	84	0.53	14.72	25.07
45 '	21930	160	3960	15	0.0	0.00	0.04	114	1661	10.38	10.42	90	1322	8.26	6333	950	5.94	0.10	84	0.53	14.83	25.25
46 '	22134	160	4040	15	0.0	0.00	0.04	114	1677	10.48	10.52	90	1334	8.34	6392	959	5.99	0.10	84	0.53	14.96	25.48
47 '	23343	160	4130	15	0.0	0.00	0.04	114	1768	11.05	11.09	90	1407	8.79	6741	1011	6.32	0.11	84	0.53	15.75	26.84
48 '	23538	160	4390	15	0.0	0.00	0.04	114	1783	11.14	11.18	90	1419	8.87	6798	1020	6.37	0.11	84	0.53	15.87	27.06
51 '	27764	160	4650	15	0.0	0.00	0.04	114	2103	13.15	13.19	90	1673	10.46	8018	1203	7.52	0.13	84	0.53	18.63	31.82
52 '	28288	160	4920	15	0.0	0.00	0.04	114	2143	13.39	13.43	90	1705	10.66	8170	1225	7.66	0.13	84	0.53	18.97	32.41

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Offset Disc - Single																						
6 x 4½ tube frame, 22" blade																						
Rigid																						
6 '	4630	160	240	15	0.0	0.00	0.03	114	351	2.19	2.22	90	279	1.74	1337	201	1.25	0.02	40	0.25	3.27	5.49
8 '	5230	160	360	15	0.0	0.00	0.03	114	396	2.48	2.51	90	315	1.97	1510	227	1.42	0.02	42	0.26	3.67	6.18
9 '	5690	160	480	15	0.0	0.00	0.03	114	431	2.69	2.72	90	343	2.14	1643	246	1.54	0.03	44	0.28	3.99	6.71
10 '	6940	160	600	15	0.0	0.00	0.03	114	526	3.29	3.32	90	418	2.61	2004	301	1.88	0.03	48	0.30	4.83	8.14
12 '	8555	160	720	15	0.0	0.00	0.03	114	648	4.05	4.08	90	516	3.22	2471	371	2.32	0.04	51	0.32	5.90	9.98
14 '	9250	160	840	15	0.0	0.00	0.03	114	701	4.38	4.41	90	557	3.48	2671	401	2.50	0.04	63	0.39	6.43	10.84
16 '	9960	160	960	15	0.0	0.00	0.03	114	755	4.72	4.75	90	600	3.75	2876	431	2.70	0.05	68	0.42	6.92	11.67
17 '	10840	160	1040	15	0.0	0.00	0.03	114	821	5.13	5.16	90	653	4.08	3131	470	2.93	0.05	73	0.46	7.53	12.69
18 '	11350	160	1080	15	0.0	0.00	0.03	114	860	5.37	5.40	90	684	4.28	3278	492	3.07	0.05	75	0.47	7.87	13.27
20 '	11865	160	1200	15	0.0	0.00	0.03	114	899	5.62	5.65	90	715	4.47	3427	514	3.21	0.06	84	0.53	8.26	13.91
Folding Wing																						
18 '	11970	160	1080	15	0.0	0.00	0.03	114	907	5.67	5.70	90	721	4.51	3457	519	3.24	0.06	75	0.47	8.27	13.97
20 '	12590	160	1200	15	0.0	0.00	0.03	114	954	5.96	5.99	90	759	4.74	3636	545	3.41	0.06	84	0.53	8.74	14.73

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Offset Disc - Double																						
4 x 4 tube frame, 22" blade																						
Rigid																						
12 '	10748	160	720	15	0.0	0.00	0.03	114	814	5.09	5.12	90	648	4.05	3104	466	2.91	0.05	51	0.32	7.33	12.45
13 '	11440	160	790	15	0.0	0.00	0.03	114	867	5.42	5.45	90	689	4.31	3304	496	3.10	0.05	63	0.39	7.85	13.30
14 '	12377	160	840	15	0.0	0.00	0.03	114	938	5.86	5.89	90	746	4.66	3574	536	3.35	0.06	68	0.42	8.50	14.39
15 '	12999	160	880	15	0.0	0.00	0.03	114	985	6.15	6.18	90	783	4.90	3754	563	3.52	0.06	73	0.46	8.93	15.12
16 '	13859	160	960	15	0.0	0.00	0.03	114	1050	6.56	6.59	90	835	5.22	4002	600	3.75	0.07	84	0.53	9.56	16.15
18 '	14672	160	1080	15	0.0	0.00	0.03	114	1112	6.95	6.98	90	884	5.53	4237	636	3.97	0.07	84	0.53	10.09	17.07
20 '	15770	160	1200	15	0.0	0.00	0.03	114	1195	7.47	7.50	90	950	5.94	4554	683	4.27	0.07	84	0.53	10.81	18.31
21 '	17125	160	1260	15	0.0	0.00	0.03	114	1297	8.11	8.14	90	1032	6.45	4946	742	4.64	0.08	84	0.53	11.69	19.83
22 '	19285	160	1320	15	0.0	0.00	0.03	114	1461	9.13	9.16	90	1162	7.26	5570	835	5.22	0.09	89	0.56	13.13	22.29
23 '	20165	160	1380	15	0.0	0.00	0.03	114	1528	9.55	9.58	90	1215	7.60	5824	874	5.46	0.09	89	0.56	13.71	23.28
25 '	20840	160	1440	15	0.0	0.00	0.03	114	1579	9.87	9.90	90	1256	7.85	6019	903	5.64	0.10	89	0.56	14.15	24.04
26 '	21225	160	1560	15	0.0	0.00	0.03	114	1608	10.05	10.08	90	1279	7.99	6130	919	5.75	0.10	89	0.56	14.40	24.48
28 '	22895	160	1690	15	0.0	0.00	0.03	114	1734	10.84	10.87	90	1380	8.62	6612	992	6.20	0.11	89	0.56	15.49	26.36
30 '	23435	160	1810	15	0.0	0.00	0.03	114	1775	11.10	11.13	90	1412	8.83	6768	1015	6.35	0.11	89	0.56	15.84	26.96
31 '	24640	160	1870	15	0.0	0.00	0.03	114	1867	11.67	11.70	90	1485	9.28	7116	1067	6.67	0.12	89	0.56	16.62	28.32
Folding Wing																						
18 '	21108	160	1080	15	0.0	0.00	0.03	114	1599	9.99	10.02	90	1272	7.95	6096	914	5.71	0.10	84	0.53	14.29	24.31
20 '	22000	160	1200	15	0.0	0.00	0.03	114	1667	10.42	10.45	90	1326	8.29	6354	953	5.96	0.10	84	0.53	14.87	25.32
21 '	23648	160	1260	15	0.0	0.00	0.03	114	1792	11.20	11.23	90	1425	8.91	6830	1024	6.40	0.11	84	0.53	15.95	27.17

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS o/o	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION o/o	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
22 '	24025	160	1320	15	0.0	0.00	0.03	114	1820	11.38	11.41	90	1448	9.05	6938	1041	6.50	0.11	89	0.56	16.22	27.63
23 '	26064	160	1380	15	0.0	0.00	0.03	114	1975	12.34	12.37	90	1571	9.82	7527	1129	7.06	0.12	89	0.56	17.55	29.92
24 '	28415	160	1440	15	0.0	0.00	0.03	114	2153	13.45	13.48	90	1712	10.70	8206	1231	7.69	0.13	89	0.56	19.09	32.57
25 '	29604	160	1520	15	0.0	0.00	0.03	114	2243	14.02	14.05	90	1784	11.15	8550	1282	8.02	0.14	89	0.56	19.86	33.91
26 '	30985	160	1560	15	0.0	0.00	0.03	114	2347	14.67	14.70	90	1867	11.67	8948	1342	8.39	0.15	89	0.56	20.76	35.46
27 '	31608	160	1620	15	0.0	0.00	0.03	114	2395	14.97	15.00	90	1905	11.91	9128	1369	8.56	0.15	89	0.56	21.17	36.16
28 '	31713	160	1690	15	0.0	0.00	0.03	114	2403	15.02	15.05	90	1911	11.95	9159	1374	8.59	0.15	89	0.56	21.24	36.28
29 '	32053	160	1850	15	0.0	0.00	0.03	114	2428	15.18	15.21	90	1932	12.07	9257	1389	8.68	0.15	89	0.56	21.46	36.66
32 '	34288	160	1920	15	0.0	0.00	0.03	114	2598	16.23	16.26	90	2066	12.92	9902	1485	9.28	0.16	89	0.56	22.92	39.18
33 '	36980	160	1980	15	0.0	0.00	0.03	114	2802	17.51	17.54	90	2229	13.93	10680	1602	10.01	0.17	89	0.56	24.67	42.21
35 '	41270	160	2040	15	0.0	0.00	0.03	114	3127	19.54	19.57	90	2487	15.54	11919	1788	11.17	0.19	89	0.56	27.47	47.04
36 '	43906	160	2100	15	0.0	0.00	0.03	114	3326	20.79	20.82	90	2646	16.54	12680	1902	11.89	0.21	89	0.56	29.19	50.01
38 '	45872	160	2280	15	0.0	0.00	0.03	114	3475	21.72	21.75	90	2765	17.28	13248	1987	12.42	0.22	89	0.56	30.47	52.22
40 '	47910	160	2400	15	0.0	0.00	0.03	114	3630	22.68	22.71	90	2887	18.05	13836	2075	12.97	0.22	89	0.56	31.80	54.51
47 '	49492	160	2560	15	0.0	0.00	0.03	114	3749	23.43	23.46	90	2983	18.64	14293	2144	13.40	0.23	89	0.56	32.83	56.29

TABLE 6

		ANNUAL USE		EST	VARIABLE COSTS							FIXED COSTS										TOTAL
					FUEL		LUBE	REPAIRS			TOTAL	DEPRECIATION			INTEREST			INS	HOUSING		TOTAL	COSTS
IMPLEMENT	AVE LIST PRICE	HRS	ACRES	LIFE YRS	GAL /HR	$/ HR	$/ HR	*/*	$/ YR	$/ HR	PER HOUR	*/*	$/ YR	$/ HR	AVE VALUE	$/ YR	$/ HR	$/ HR	$/ YR	$/ HR	PER HOUR	PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Tandem Disc																						
2 x 4 or 3 x 3 tube frame, 20" blade, scrapers																						
3 point																						
6 '	3490	160	220	15	0.0	0.00	0.03	114	264	1.65	1.68	90	210	1.31	1008	151	0.94	0.02	28	0.17	2.45	4.13
7 '	3620	160	260	15	0.0	0.00	0.03	114	274	1.71	1.74	90	218	1.36	1045	157	0.98	0.02	31	0.19	2.55	4.30
8 '	3700	160	300	15	0.0	0.00	0.03	114	280	1.75	1.78	90	223	1.39	1069	160	1.00	0.02	34	0.21	2.63	4.41
9 '	3995	160	340	15	0.0	0.00	0.03	114	303	1.89	1.92	90	241	1.50	1154	173	1.08	0.02	40	0.25	2.86	4.78
10 '	5050	160	380	15	0.0	0.00	0.03	114	383	2.39	2.42	90	304	1.90	1458	219	1.37	0.02	43	0.27	3.56	5.98
11 '	6590	160	420	15	0.0	0.00	0.03	114	499	3.12	3.15	90	397	2.48	1903	285	1.78	0.03	46	0.29	4.58	7.74
13 '	6950	160	500	15	0.0	0.00	0.03	114	527	3.29	3.32	90	419	2.62	2007	301	1.88	0.03	53	0.33	4.86	8.18
Tandem Disc - Trailing																						
4 x 4 or 3 x 5 tube frame, 20" blade, scrapers																						
Rigid																						
10 '	5855	160	600	15	0.0	0.00	0.04	114	444	2.77	2.81	90	353	2.21	1691	254	1.59	0.03	43	0.27	4.09	6.90
12 '	6755	160	700	15	0.0	0.00	0.04	114	512	3.20	3.24	90	407	2.54	1951	293	1.83	0.03	51	0.32	4.72	7.96
13 '	7740	160	770	15	0.0	0.00	0.04	114	586	3.66	3.70	90	466	2.92	2235	335	2.10	0.04	56	0.35	5.40	9.10
14 '	8370	160	810	15	0.0	0.00	0.04	114	634	3.96	4.00	90	504	3.15	2417	363	2.27	0.04	63	0.39	5.85	9.85
15 '	9340	160	890	15	0.0	0.00	0.04	114	708	4.42	4.46	90	563	3.52	2697	405	2.53	0.04	64	0.40	6.49	10.95
16 '	10735	160	960	15	0.0	0.00	0.04	114	813	5.08	5.12	90	647	4.04	3100	465	2.91	0.05	68	0.42	7.43	12.55
17 '	11000	160	1020	15	0.0	0.00	0.04	114	833	5.21	5.25	90	663	4.14	3177	477	2.98	0.05	69	0.43	7.60	12.85
18 '	11485	160	1080	15	0.0	0.00	0.04	114	870	5.44	5.48	90	692	4.33	3317	498	3.11	0.05	73	0.46	7.95	13.42
19 '	12195	160	1150	15	0.0	0.00	0.04	114	924	5.77	5.81	90	735	4.59	3522	528	3.30	0.06	84	0.53	8.48	14.29
21 '	12770	160	1260	15	0.0	0.00	0.04	114	967	6.05	6.09	90	770	4.81	3688	553	3.46	0.06	84	0.53	8.85	14.94

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Folding Wing																						
17 '	14340	160	1020	15	0.0	0.00	0.04	114	1086	6.79	6.83	90	864	5.40	4141	621	3.88	0.07	69	0.43	9.78	16.61
18 '	14695	160	1080	15	0.0	0.00	0.04	114	1113	6.96	7.00	90	886	5.54	4244	637	3.98	0.07	73	0.46	10.04	17.04
19 '	15048	160	1150	15	0.0	0.00	0.04	114	1140	7.13	7.17	90	907	5.67	4346	652	4.07	0.07	84	0.53	10.34	17.50
21 '	17729	160	1260	15	0.0	0.00	0.04	114	1343	8.39	8.43	90	1068	6.68	5120	768	4.80	0.08	84	0.53	12.09	20.52
22 '	18381	160	1320	15	0.0	0.00	0.04	114	1393	8.70	8.74	90	1108	6.92	5308	796	4.98	0.09	84	0.53	12.51	21.25
23 '	21128	160	1380	15	0.0	0.00	0.04	114	1601	10.00	10.04	90	1273	7.96	6102	915	5.72	0.10	84	0.53	14.30	24.35
24 '	22250	160	1440	15	0.0	0.00	0.04	114	1686	10.54	10.58	90	1341	8.38	6426	964	6.02	0.10	84	0.53	15.03	25.61
25 '	23150	160	1500	15	0.0	0.00	0.04	114	1754	10.96	11.00	90	1395	8.72	6686	1003	6.27	0.11	84	0.53	15.62	26.62
26 '	24891	160	1560	15	0.0	0.00	0.04	114	1886	11.79	11.83	90	1500	9.38	7189	1078	6.74	0.12	84	0.53	16.76	28.58
27 '	25799	160	1630	15	0.0	0.00	0.04	114	1954	12.22	12.26	90	1555	9.72	7451	1118	6.99	0.12	84	0.53	17.35	29.60
28 '	26298	160	1690	15	0.0	0.00	0.04	114	1992	12.45	12.49	90	1585	9.91	7595	1139	7.12	0.12	84	0.53	17.67	30.17
30 '	27990	160	1800	15	0.0	0.00	0.04	114	2120	13.25	13.29	90	1687	10.54	8084	1213	7.58	0.13	84	0.53	18.78	32.07
31 '	28619	160	1860	15	0.0	0.00	0.04	114	2168	13.55	13.59	90	1725	10.78	8265	1240	7.75	0.13	84	0.53	19.19	32.78
32 '	29238	160	1920	15	0.0	0.00	0.04	114	2215	13.84	13.88	90	1762	11.01	8444	1267	7.92	0.14	84	0.53	19.59	33.48
34 '	31000	160	2040	15	0.0	0.00	0.04	114	2348	14.68	14.72	90	1868	11.68	8953	1343	8.39	0.15	84	0.53	20.74	35.46
Discer																						
with seed and fertilizer box, fluted seed cups, auger fertilizer feed, 20" discs																						
12 '	8979	160	800	15	0.0	0.00	0.03	114	680	4.25	4.28	90	541	3.38	2593	389	2.43	0.04	26	0.16	6.02	10.30
15 '	11095	160	1070	15	0.0	0.00	0.03	114	841	5.25	5.28	90	669	4.18	3204	481	3.00	0.05	31	0.19	7.43	12.71

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL/HR	FUEL $/HR	LUBE $/HR	REPAIRS %	REPAIRS $/YR	REPAIRS $/HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/YR	DEPRECIATION $/HR	INTEREST AVE VALUE	INTEREST $/YR	INTEREST $/HR	INS $/HR	HOUSING $/YR	HOUSING $/HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Harrow Drawbar																						
Hydraulic																						
25-39'	2672	60	840	15	0.0	0.00	0.04	32	57	0.94	0.98	90	161	2.68	772	116	1.93	0.03	36	0.60	5.25	6.23
40-44'	2656	60	1010	15	0.0	0.00	0.04	32	56	0.94	0.98	90	160	2.67	767	115	1.92	0.03	43	0.72	5.34	6.31
45-49'	3050	60	1130	15	0.0	0.00	0.04	32	65	1.08	1.12	90	184	3.06	881	132	2.20	0.04	48	0.80	6.10	7.22
50-54'	3200	60	1240	15	0.0	0.00	0.04	32	68	1.13	1.17	90	193	3.21	924	139	2.31	0.04	53	0.88	6.45	7.62
55-59'	3492	60	1350	15	0.0	0.00	0.04	32	74	1.23	1.27	90	210	3.51	1008	151	2.52	0.04	54	0.90	6.97	8.24
60-64'	3790	60	1460	15	0.0	0.00	0.04	32	80	1.34	1.38	90	228	3.81	1095	164	2.74	0.05	58	0.97	7.56	8.93
65-69'	3948	60	1580	15	0.0	0.00	0.04	32	84	1.39	1.43	90	238	3.97	1140	171	2.85	0.05	59	0.98	7.85	9.28
70-74'	4170	60	1700	15	0.0	0.00	0.04	32	88	1.47	1.51	90	251	4.19	1204	181	3.01	0.05	63	1.05	8.30	9.81
75-79'	4850	60	1820	15	0.0	0.00	0.04	32	103	1.71	1.75	90	292	4.87	1401	210	3.50	0.06	66	1.10	9.53	11.28
80-84'	5390	60	1940	15	0.0	0.00	0.04	32	114	1.90	1.94	90	325	5.41	1557	233	3.89	0.07	68	1.13	10.51	12.45
85-89'	5621	60	1060	15	0.0	0.00	0.04	32	119	1.98	2.02	90	339	5.65	1623	244	4.06	0.07	70	1.17	10.94	12.96
Autofold																						
20-24'	3897	60	500	15	0.0	0.00	0.04	32	82	1.37	1.41	90	235	3.91	1125	169	2.81	0.05	23	0.38	7.16	8.57
25-29'	4371	60	630	15	0.0	0.00	0.04	32	93	1.54	1.58	90	263	4.39	1262	189	3.16	0.05	29	0.48	8.08	9.67
30-34'	4722	60	880	15	0.0	0.00	0.04	32	100	1.67	1.71	90	285	4.74	1364	205	3.41	0.06	36	0.60	8.81	10.52
35-39'	4861	60	1000	15	0.0	0.00	0.04	32	103	1.71	1.75	90	293	4.88	1404	211	3.51	0.06	43	0.72	9.17	10.92
40-44'	5206	60	1130	15	0.0	0.00	0.04	32	110	1.84	1.88	90	314	5.23	1503	226	3.76	0.07	48	0.80	9.85	11.73
45-49'	5599	60	1250	15	0.0	0.00	0.04	32	119	1.98	2.02	90	337	5.62	1617	243	4.04	0.07	53	0.88	10.62	12.64

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL/HR	FUEL $/HR	LUBE $/HR	REPAIRS %/*	REPAIRS $/YR	REPAIRS $/HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/*	DEPRECIATION $/YR	DEPRECIATION $/HR	INTEREST AVE VALUE	INTEREST $/YR	INTEREST $/HR	INS $/HR	HOUSING $/YR	HOUSING $/HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
50-54'	5903	60	1380	15	0.0	0.00	0.04	32	125	2.08	2.12	90	356	5.93	1700	255	4.25	0.07	54	0.90	11.15	13.28
55-59'	6063	60	1500	15	0.0	0.00	0.04	32	128	2.14	2.18	90	365	6.09	1746	262	4.37	0.08	58	0.97	11.50	13.68
60-64'	6441	60	1630	15	0.0	0.00	0.04	32	136	2.27	2.31	90	388	6.47	1855	278	4.64	0.08	59	0.98	12.17	14.48
65-69'	6670	60	1750	15	0.0	0.00	0.04	32	141	2.35	2.39	90	402	6.70	1921	288	4.80	0.08	63	1.05	12.64	15.03
70-74'	7059	60	1880	15	0.0	0.00	0.04	32	149	2.49	2.53	90	425	7.09	2033	305	5.08	0.09	66	1.10	13.36	15.89
75-79'	8036	60	2000	15	0.0	0.00	0.04	32	170	2.84	2.88	90	484	8.07	2314	347	5.79	0.10	68	1.13	15.09	17.97
80-84'	8399	60	2130	15	0.0	0.00	0.04	32	178	2.96	3.00	90	506	8.44	2419	363	6.05	0.10	69	1.15	15.74	18.74
Harrow Sets with coil spring																						
30-39'	1608	60	840	15	0.0	0.00		32	34	0.57	0.57	90	97	1.62	463	69	1.16	0.02		0.00	2.79	3.36
40-49'	2074	60	1010	15	0.0	0.00		32	44	0.73	0.73	90	125	2.08	597	90	1.49	0.03		0.00	3.60	4.33
50-59'	2540	60	1240	15	0.0	0.00		32	54	0.90	0.90	90	153	2.55	732	110	1.83	0.03		0.00	4.41	5.31
60-69'	3006	60	1460	15	0.0	0.00		32	64	1.06	1.06	90	181	3.02	866	130	2.16	0.04		0.00	5.22	6.28
70-79'	3472	60	1700	15	0.0	0.00		32	73	1.22	1.22	90	209	3.49	1000	150	2.50	0.04		0.00	6.03	7.26
80-89'	3938	60	1940	15	0.0	0.00		32	83	1.39	1.39	90	237	3.96	1134	170	2.84	0.05		0.00	6.84	8.23
with spiketooth																						
30-39'	1173	60	840	15	0.0	0.00		32	25	0.41	0.41	90	71	1.18	338	51	0.84	0.01		0.00	2.04	2.45
40-49'	1513	60	1010	15	0.0	0.00		32	32	0.53	0.53	90	91	1.52	436	65	1.09	0.02		0.00	2.64	3.16

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
50 -59'	1853	60	1240	15	0.0	0.00		32	39	0.65	0.65	90	112	1.86	535	80	1.34	0.02		0.00	3.22	3.88
60 -69'	2193	60	1460	15	0.0	0.00		32	46	0.77	0.77	90	132	2.20	633	95	1.58	0.03		0.00	3.81	4.59
70 -79'	2533	60	1700	15	0.0	0.00		32	54	0.89	0.89	90	153	2.54	732	110	1.83	0.03		0.00	4.40	5.30
80 -89'	2873	60	1940	15	0.0	0.00		32	61	1.01	1.01	90	173	2.89	830	124	2.07	0.04		0.00	5.00	6.01
Parallel Bar																						
30 -39'	578	60	840	15	0.0	0.00		32	12	0.20	0.20	90	35	0.58	167	25	0.42	0.01		0.00	1.01	1.21
40 -49'	745	60	1010	15	0.0	0.00		32	16	0.26	0.26	90	45	0.75	215	32	0.54	0.01		0.00	1.30	1.56
50 -59'	913	60	1240	15	0.0	0.00		32	19	0.32	0.32	90	55	0.92	264	40	0.66	0.01		0.00	1.59	1.91
60 -69'	1080	60	1460	15	0.0	0.00		32	23	0.38	0.38	90	65	1.08	312	47	0.78	0.01		0.00	1.88	2.26
70 -79'	1247	60	1700	15	0.0	0.00		32	26	0.44	0.44	90	75	1.25	360	54	0.90	0.02		0.00	2.17	2.61
80 -89'	1415	60	1940	15	0.0	0.00		32	30	0.50	0.50	90	85	1.42	409	61	1.02	0.02		0.00	2.46	2.96
Harrow Sections																						
Coil Spring																						
5 '	220	60	124	15	0.0	0.00		32	5	0.08	0.08	90	13	0.22	64	10	0.16	0.00		0.00	0.38	0.46
5.5'	260	60	130	15	0.0	0.00		32	6	0.09	0.09	90	16	0.26	75	11	0.19	0.00		0.00	0.45	0.54
6 '	295	60	135	15	0.0	0.00		32	6	0.10	0.10	90	18	0.30	85	13	0.21	0.00		0.00	0.51	0.62
7 '	328	60	140	15	0.0	0.00		32	7	0.12	0.12	90	20	0.33	95	14	0.24	0.00		0.00	0.57	0.69

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Spiketooth																						
5 '	180	60	124	15	0.0	0.00		32	4	0.06	0.06	90	11	0.18	52	8	0.13	0.00		0.00	0.31	0.38
6 '	194	60	135	15	0.0	0.00		32	4	0.07	0.07	90	12	0.19	56	8	0.14	0.00		0.00	0.34	0.41
Parallel Bar																						
3.5'	57	60	90	15	0.0	0.00		32	1	0.02	0.02	90	3	0.06	16	2	0.04	0.00		0.00	0.10	0.12
5 '	86	60	124	15	0.0	0.00		32	2	0.03	0.03	90	5	0.09	25	4	0.06	0.00		0.00	0.15	0.18
3 Bar Tine																						
3-4'	130	60	79	15	0.0	0.00		32	3	0.05	0.05	90	8	0.13	38	6	0.09	0.00		0.00	0.23	0.27
4-5'	144	60	102	15	0.0	0.00		32	3	0.05	0.05	90	9	0.14	42	6	0.10	0.00		0.00	0.25	0.30
5-6'	169	60	124	15	0.0	0.00		32	4	0.06	0.06	90	10	0.17	49	7	0.12	0.00		0.00	0.29	0.35
6-7'	199	60	135	15	0.0	0.00		32	4	0.07	0.07	90	12	0.20	57	9	0.14	0.00		0.00	0.35	0.42
7-8'	208	60	158	15	0.0	0.00		32	4	0.07	0.07	90	13	0.21	60	9	0.15	0.00		0.00	0.36	0.44
4 Bar Tine																						
4.5'	240	60	114	15	0.0	0.00		32	5	0.08	0.08	90	14	0.24	69	10	0.17	0.00		0.00	0.42	0.50
6 '	281	60	135	15	0.0	0.00		32	6	0.10	0.10	90	17	0.28	81	12	0.20	0.00		0.00	0.49	0.59
5 Bar Spring																						
5.5'	180	60	145	15	0.0	0.00		32	4	0.06	0.06	90	11	0.18	52	8	0.13	0.00		0.00	0.31	0.38
6 '	201	60	155	15	0.0	0.00		32	4	0.07	0.07	90	12	0.20	58	9	0.15	0.00		0.00	0.35	0.42

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Pulvimulcher																						
Rigid																						
10 '	5427	60	350	15	0.0	0.00	0.04	32	115	1.91	1.95	90	327	5.45	1567	235	3.92	0.07	43	0.72	10.15	12.11
12 '	6174	60	420	15	0.0	0.00	0.04	32	131	2.18	2.22	90	372	6.20	1783	267	4.46	0.08	51	0.85	11.59	13.80
14 '	7108	60	490	15	0.0	0.00	0.04	32	150	2.51	2.55	90	428	7.14	2053	308	5.13	0.09	51	0.85	13.21	15.76
15 '	7459	60	520	15	0.0	0.00	0.04	32	158	2.63	2.67	90	450	7.49	2154	323	5.39	0.09	53	0.88	13.85	16.53
Folding Wing																						
21	16186	60	770	15	0.0	0.00	0.04	32	343	5.71	5.75	90	975	16.26	4675	701	11.69	0.20	61	1.02	29.16	34.91
25	17314	60	870	15	0.0	0.00	0.04	32	366	6.11	6.15	90	1043	17.39	5000	750	12.50	0.22	64	1.07	31.17	37.32
30	29698	60	1070	15	0.0	0.00	0.04	32	629	10.48	10.52	90	1790	29.83	8577	1287	21.44	0.37	66	1.10	52.74	63.26
Moldboard Plows																						
Integral																						
2 x 18	5000	100	80	15	0.0	0.00	0.03	62	206	2.06	2.09	90	301	3.01	1444	217	2.17	0.04	8	0.08	5.30	7.38
3 x 18	7950	100	160	15	0.0	0.00	0.03	62	327	3.27	3.30	90	479	4.79	2296	344	3.44	0.06	16	0.16	8.45	11.75
4 x 18	10600	140	280	15	0.0	0.00	0.03	96	675	4.82	4.85	90	639	4.56	3061	459	3.28	0.06	24	0.17	8.07	12.92
5 x 18	12500	140	350	15	0.0	0.00	0.03	96	796	5.69	5.72	90	753	5.38	3610	541	3.87	0.07	34	0.24	9.56	15.27
Two Way (Roll Over)																						
3 x 18	9600	100	160	15	0.0	0.00	0.03	62	395	3.95	3.98	90	579	5.79	2772	416	4.16	0.07	16	0.16	10.18	14.15
4 x 18	11100	140	280	15	0.0	0.00	0.03	96	707	5.05	5.08	90	669	4.78	3206	481	3.43	0.06	24	0.17	8.44	13.52
5 x 18	12600	140	350	15	0.0	0.00	0.03	96	802	5.73	5.76	90	759	5.42	3639	546	3.90	0.07	34	0.24	9.63	15.39

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Semi - Integral spring trip, auto reset																						
3 x 18	5000	160	250	15	0.0	0.00	0.03	114	379	2.37	2.40	90	301	1.88	1444	217	1.35	0.02	16	0.10	3.36	5.76
4 x 18	7500	160	350	15	0.0	0.00	0.03	114	568	3.55	3.58	90	452	2.82	2166	325	2.03	0.04	24	0.15	5.04	8.62
5 x 18	9398	160	410	15	0.0	0.00	0.03	114	712	4.45	4.48	90	566	3.54	2714	407	2.54	0.04	34	0.21	6.34	10.82
6 x 18	10556	160	510	15	0.0	0.00	0.03	114	800	5.00	5.03	90	636	3.98	3049	457	2.86	0.05	41	0.26	7.14	12.17
8 x 18	13092	160	670	15	0.0	0.00	0.03	114	992	6.20	6.23	90	789	4.93	3781	567	3.54	0.06	61	0.38	8.92	15.15
Hinged																						
8 x 18	16603	160	670	15	0.0	0.00	0.03	114	1258	7.86	7.89	90	1001	6.25	4795	719	4.50	0.08	61	0.38	11.21	19.10
10 x 18	18430	160	830	15	0.0	0.00	0.03	114	1396	8.73	8.76	90	1111	6.94	5323	798	4.99	0.09	81	0.51	12.52	21.28
12 x 18	21157	160	990	15	0.0	0.00	0.03	114	1603	10.02	10.05	90	1275	7.97	6110	917	5.73	0.10	84	0.53	14.32	24.37
Trailing auto reset																						
4 x 18	10276	140	310	15	0.0	0.00	0.03	96	654	4.67	4.70	90	619	4.42	2968	445	3.18	0.06	26	0.19	7.84	12.55
5 x 18	11455	140	350	15	0.0	0.00	0.03	96	730	5.21	5.24	90	690	4.93	3308	496	3.54	0.06	39	0.28	8.82	14.06
6 x 18	12248	140	420	15	0.0	0.00	0.03	96	780	5.57	5.60	90	738	5.27	3537	531	3.79	0.07	46	0.33	9.46	15.06
7 x 18	14925	140	500	15	0.0	0.00	0.03	96	951	6.79	6.82	90	899	6.42	4310	647	4.62	0.08	56	0.40	11.52	18.34
8 x 18	16685	160	690	15	0.0	0.00	0.03	114	1264	7.90	7.93	90	1006	6.28	4819	723	4.52	0.08	63	0.39	11.27	19.20
10 x 18	23138	160	760	15	0.0	0.00	0.03	114	1753	10.96	10.99	90	1394	8.72	6682	1002	6.26	0.11	68	0.42	15.51	26.50
12 x 18	25582	160	860	15	0.0	0.00	0.03	114	1938	12.11	12.14	90	1542	9.64	7388	1108	6.93	0.12	73	0.46	17.14	29.28
14 x 18	28190	160	970	15	0.0	0.00	0.03	114	2136	13.35	13.38	90	1699	10.62	8141	1221	7.63	0.13	75	0.47	18.85	32.23
16 x 18	30445	160	1070	15	0.0	0.00	0.03	114	2306	14.42	14.45	90	1835	11.47	8793	1319	8.24	0.14	77	0.48	20.33	34.78

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Rodweeder																						
trailed																						
12 '	1800	120	720	15	0.0	0.00	0.05	78	94	0.78	0.83	90	108	0.90	520	78	0.65	0.01	41	0.34	1.91	2.74
14 '	2400	120	850	15	0.0	0.00	0.05	78	125	1.04	1.09	90	145	1.21	693	104	0.87	0.02	48	0.40	2.49	3.58
18 '	3500	120	1090	15	0.0	0.00	0.05	78	182	1.52	1.57	90	211	1.76	1011	152	1.26	0.02	63	0.53	3.57	5.14
24 '	4500	120	1450	15	0.0	0.00	0.05	78	235	1.95	2.00	90	271	2.26	1300	195	1.62	0.03	84	0.70	4.61	6.62
30 '	5800	120	1820	15	0.0	0.00	0.05	78	302	2.52	2.57	90	350	2.91	1675	251	2.09	0.04	84	0.70	5.74	8.31
36 '	6300	120	2180	15	0.0	0.00	0.05	78	328	2.74	2.79	90	380	3.16	1819	273	2.27	0.04	84	0.70	6.18	8.96
48 '	11400	120	2420	15	0.0	0.00	0.05	78	594	4.95	5.00	90	687	5.73	3292	494	4.12	0.07	84	0.70	10.61	15.61
trailed - with multiplex																						
12 '	2855	120	720	15	0.0	0.00	0.05	78	149	1.24	1.29	90	172	1.43	825	124	1.03	0.02	41	0.34	2.82	4.11
14 '	3090	120	850	15	0.0	0.00	0.05	78	161	1.34	1.39	90	186	1.55	892	134	1.12	0.02	48	0.40	3.09	4.48
16 '	4130	120	970	15	0.0	0.00	0.05	78	215	1.79	1.84	90	249	2.07	1193	179	1.49	0.03	55	0.46	4.05	5.89
18 '	4300	120	1090	15	0.0	0.00	0.05	78	224	1.87	1.92	90	259	2.16	1242	186	1.55	0.03	63	0.53	4.26	6.18
24 '	6187	120	1450	15	0.0	0.00	0.05	78	322	2.69	2.74	90	373	3.11	1787	268	2.23	0.04	84	0.70	6.08	8.82
30 '	7753	120	1820	15	0.0	0.00	0.05	78	404	3.37	3.42	90	467	3.89	2239	336	2.80	0.05	84	0.70	7.44	10.86
36 '	8505	120	2180	15	0.0	0.00	0.05	78	443	3.69	3.74	90	513	4.27	2456	368	3.07	0.05	84	0.70	8.09	11.84
48 '	14045	120	2420	15	0.0	0.00	0.05	78	732	6.10	6.15	90	846	7.05	4056	608	5.07	0.09	84	0.70	12.91	19.06
60 '	17420	120	2660	15	0.0	0.00	0.05	78	908	7.57	7.62	90	1050	8.75	5031	755	6.29	0.11	84	0.70	15.85	23.46

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Rodweeder Attachment to cultivator																						
Hydraulic lift																						
10'	599	120	470	15	0.0	0.00	0.04	78	31	0.26	0.30	90	36	0.30	173	26	0.22	0.00	0.00	0.52	0.82	
12'	645	120	560	15	0.0	0.00	0.04	78	34	0.28	0.32	90	39	0.32	186	28	0.23	0.00	0.00	0.56	0.88	
14'	651	120	650	15	0.0	0.00	0.04	78	34	0.28	0.32	90	39	0.33	188	28	0.24	0.00	0.00	0.57	0.89	
16'	702	120	740	15	0.0	0.00	0.04	78	37	0.30	0.34	90	42	0.35	203	30	0.25	0.00	0.00	0.61	0.96	
18'	764	120	840	15	0.0	0.00	0.04	78	40	0.33	0.37	90	46	0.38	221	33	0.28	0.00	0.00	0.66	1.04	
20'	1145	120	930	15	0.0	0.00	0.04	78	60	0.50	0.54	90	69	0.58	331	50	0.41	0.01	0.00	1.00	1.53	
22'	1196	120	1030	15	0.0	0.00	0.04	78	62	0.52	0.56	90	72	0.60	345	52	0.43	0.01	0.00	1.04	1.60	
24'	1258	120	1120	15	0.0	0.00	0.04	78	66	0.55	0.59	90	76	0.63	363	54	0.45	0.01	0.00	1.09	1.68	
26'	1264	120	1210	15	0.0	0.00	0.04	78	66	0.55	0.59	90	76	0.63	365	55	0.46	0.01	0.00	1.10	1.69	
28'	1315	120	1300	15	0.0	0.00	0.04	78	69	0.57	0.61	90	79	0.66	380	57	0.47	0.01	0.00	1.14	1.75	
30'	1366	120	1400	15	0.0	0.00	0.04	78	71	0.59	0.63	90	82	0.69	395	59	0.49	0.01	0.00	1.19	1.82	
32'	1417	120	1470	15	0.0	0.00	0.04	78	74	0.62	0.66	90	85	0.71	409	61	0.51	0.01	0.00	1.23	1.89	

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL/HR	FUEL $/HR	LUBE $/HR	REPAIRS */*	REPAIRS $/YR	REPAIRS $/HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/YR	DEPRECIATION $/HR	INTEREST AVE VALUE	INTEREST $/YR	INTEREST $/HR	INS $/HR	HOUSING $/YR	HOUSING $/HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Rotary Tiller																						
with roto till - integral																						
To 80 HP																						
40"	1817	100	70	15	0.0	0.00	0.03	62	75	0.75	0.78	90	110	1.10	525	79	0.79	0.01	10	0.10	2.00	2.77
50"	2812	100	110	15	0.0	0.00	0.03	62	116	1.16	1.19	90	169	1.69	812	122	1.22	0.02	10	0.10	3.03	4.22
60"	3303	100	150	15	0.0	0.00	0.03	62	136	1.36	1.39	90	199	1.99	954	143	1.43	0.02	10	0.10	3.55	4.93
70"	3492	100	170	15	0.0	0.00	0.03	62	144	1.44	1.47	90	210	2.10	1008	151	1.51	0.03	11	0.11	3.75	5.22
80"	3755	100	200	15	0.0	0.00	0.03	62	154	1.54	1.57	90	226	2.26	1084	163	1.63	0.03	12	0.12	4.04	5.61
Over 90 HP																						
90"	6026	100	230	15	0.0	0.00	0.03	62	248	2.48	2.51	90	363	3.63	1740	261	2.61	0.05	13	0.13	6.42	8.93
100"	9848	100	260	15	0.0	0.00	0.03	62	405	4.05	4.08	90	594	5.94	2844	427	4.27	0.07	13	0.13	10.41	14.48
110"	10750	100	290	15	0.0	0.00	0.03	62	442	4.42	4.45	90	648	6.48	3105	466	4.66	0.08	14	0.14	11.36	15.81
120"	12750	100	320	15	0.0	0.00	0.03	62	524	5.24	5.27	90	768	7.68	3682	552	5.52	0.10	15	0.16	13.46	18.74
130"	18550	100	350	15	0.0	0.00	0.03	62	763	7.63	7.66	90	1118	11.18	5357	804	8.04	0.14	18	0.18	19.53	27.19
180"	22950	100	380	15	0.0	0.00	0.03	62	944	9.44	9.47	90	1383	13.83	6629	994	9.94	0.17	20	0.20	24.15	33.61

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PLANTING																						
End Wheel Drill with marker disc, acre meter																						
10 '	7920	100	360	15	0.0	0.00	0.05	67	354	3.54	3.59	90	477	4.77	2287	343	3.43	0.06	43	0.43	8.69	12.28
12 '	8857	100	440	15	0.0	0.00	0.05	67	396	3.96	4.01	90	534	5.34	2558	384	3.84	0.07	49	0.49	9.73	13.74
13 '	9225	100	470	15	0.0	0.00	0.05	67	412	4.12	4.17	90	556	5.56	2664	400	4.00	0.07	56	0.56	10.19	14.36
14 '	10426	100	510	15	0.0	0.00	0.05	67	466	4.66	4.71	90	628	6.28	3011	452	4.52	0.08	63	0.63	11.51	16.22
Press Drill with double disc																						
8 '	9520	100	290	15	0.0	0.00	0.05	67	426	4.26	4.31	90	574	5.74	2749	412	4.12	0.07	36	0.36	10.29	14.60
10 '	11050	100	360	15	0.0	0.00	0.05	67	494	4.94	4.99	90	666	6.66	3191	479	4.79	0.08	43	0.43	11.96	16.95
12 '	12000	100	425	15	0.0	0.00	0.05	67	537	5.37	5.42	90	723	7.23	3466	520	5.20	0.09	48	0.48	13.00	18.42
14 '	14307	100	480	15	0.0	0.00	0.05	67	640	6.40	6.45	90	862	8.62	4132	620	6.20	0.11	63	0.63	15.56	22.00
with hoe opener																						
8 '	8251	100	290	15	0.0	0.00	0.05	67	369	3.69	3.74	90	497	4.97	2383	357	3.57	0.06	36	0.36	8.97	12.71
10 '	8760	100	360	15	0.0	0.00	0.05	67	392	3.92	3.97	90	528	5.28	2530	379	3.79	0.07	43	0.43	9.57	13.54
11 '	10217	100	420	15	0.0	0.00	0.05	67	457	4.57	4.62	90	616	6.16	2951	443	4.43	0.08	53	0.53	11.19	15.81
12 '	10829	100	440	15	0.0	0.00	0.05	67	484	4.84	4.89	90	653	6.53	3127	469	4.69	0.08	56	0.56	11.36	16.75
14 '	12220	100	510	15	0.0	0.00	0.05	67	547	5.47	5.52	90	737	7.37	3531	530	5.30	0.09	63	0.63	13.39	18.91
18 '	13400	100	650	15	0.0	0.00	0.05	67	599	5.99	6.04	90	808	8.08	3870	580	5.80	0.10	76	0.76	14.74	20.78

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS +/-	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION +/-	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
hoe opener with transport																						
14'	17176	100	510	15	0.0	0.00	0.05	67	768	7.68	7.73	90	1035	10.35	4960	744	7.44	0.13	63	0.63	18.55	26.28
21'	26350	100	760	15	0.0	0.00	0.05	67	1178	11.78	11.83	90	1588	15.88	7610	1141	11.41	0.20	96	0.96	28.45	40.28
28'	35250	100	1010	15	0.0	0.00	0.05	67	1576	15.76	15.81	90	2124	21.24	10180	1527	15.27	0.26	128	1.28	38.06	53.87
35'	43375	100	1260	15	0.0	0.00	0.05	67	1939	19.39	19.44	90	2614	26.14	12527	1879	18.79	0.33	162	1.62	46.88	66.32
42'	51500	100	1510	15	0.0	0.00	0.05	67	2302	23.02	23.07	90	3104	31.04	14873	2231	22.31	0.39	192	1.92	55.65	78.73
49'	60450	100	1760	15	0.0	0.00	0.05	67	2703	27.03	27.08	90	3643	36.43	17458	2619	26.19	0.45	224	2.24	65.31	92.39
56'	68900	100	2020	15	0.0	0.00	0.05	67	3080	30.80	30.85	90	4152	41.52	19898	2985	29.85	0.52	256	2.56	74.45	105.30
Zero Till Drill with grass attachment																						
12 row	15500	100	440	15	0.0	0.00	0.05	67	693	6.93	6.98	90	934	9.34	4476	671	6.71	0.12	40	0.40	16.57	23.55
24 row	31000	100	880	15	0.0	0.00	0.05	67	1386	13.86	13.91	90	1868	18.68	8953	1343	13.43	0.23	80	0.80	33.22	47.13

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Air Seeders 1/																						
With Field Cultivator																						
28'	29000	100	1670	15	0.0	0.00	0.05	67	1297	12.97	13.02	90	1748	17.48	8375	1256	12.56	0.22	88	0.88	31.14	44.15
42'	35000	100	3612	15	0.0	0.00	0.05	67	1565	15.65	15.70	90	2109	21.09	10108	1516	15.16	0.26	88	0.88	37.40	53.10
With Chisel Plow																						
35'	44074	100	2170	15	0.0	0.00	0.05	67	1970	19.70	19.75	90	2656	26.56	12729	1909	19.09	0.33	88	0.88	46.87	66.62
40'	46620	100	2480	15	0.0	0.00	0.05	67	2084	20.84	20.89	90	2810	28.10	13464	2020	20.20	0.35	88	0.88	49.52	70.42
air seeder only																						
Pulled Between Implement and Tractor 2/																						
36'	24019	100		15	0.0	0.00	0.04	67	1074	10.74	10.78	90	1448	14.48	6937	1041	10.41	0.18	43	0.43	25.49	36.27
Pulled Behind Implement																						
40'	26484	100		15	0.0	0.00	0.04	67	1184	11.84	11.88	90	1596	15.96	7649	1147	11.47	0.20	43	0.43	28.06	39.94
60'	29248	100		15	0.0	0.00	0.04	67	1308	13.08	13.12	90	1763	17.63	8447	1267	12.67	0.22	43	0.43	30.95	44.06

1/ Including boots, hoses, mounting equipment, proportionator

2/ 20' to 48' avalia'le with minimal cost difference

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Drill Fill with 14' telescoping spout																						
Electric																						
4 x 11	525	10		15	0.0	0.00		2	1	0.05	0.05	91	32	3.19	143	21	2.14	0.04		0.00	5.36	5.42
Hydraulic																						
5 x 11	520	10		15	0.0	0.00		2	1	0.05	0.05	91	32	3.16	141	21	2.12	0.04		0.00	5.31	5.37
5 x 16	556	10		15	0.0	0.00		2	1	0.06	0.06	91	34	3.37	151	23	2.27	0.04		0.00	5.68	5.74
5 x 21	598	10		15	0.0	0.00		2	1	0.06	0.06	91	36	3.63	162	24	2.44	0.04		0.00	6.11	6.17

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS o/o	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION o/o	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ROW CROP EQUIPMENT																						
Cultivator																						
6 row	5908	160	610	15	0.0	0.00	0.04	114	448	2.80	2.84	90	356	2.23	1706	256	1.60	0.03	29	0.18	4.03	6.87
8 row	7442	160	840	15	0.0	0.00	0.04	114	564	3.52	3.56	90	449	2.80	2149	322	2.01	0.03	40	0.25	5.10	8.67
12 row	11216	160	1230	15	0.0	0.00	0.04	114	850	5.31	5.35	90	676	4.22	3239	486	3.04	0.05	58	0.36	7.68	13.03
Ridgers																						
6 row	5324	160	610	15	0.0	0.00	0.04	114	403	2.52	2.56	90	321	2.01	1538	231	1.44	0.02	29	0.18	3.65	6.21
8 row	6005	160	840	15	0.0	0.00	0.04	114	455	2.84	2.88	90	362	2.26	1734	260	1.63	0.03	40	0.25	4.17	7.05
12 row	9586	160	1230	15	0.0	0.00	0.04	114	726	4.54	4.58	90	578	3.61	2768	415	2.60	0.04	58	0.36	6.61	11.19
Potato Harvester				PTO																		
2 row	33550	200	200	10	0.0	0.00	0.08	121	4043	20.22	20.30	82	2762	13.81	12309	1846	9.23	0.16	161	0.81	24.01	44.30
Potato Filer																						
Telescoping																						
24 "	17810	200		10	0.0	0.00	0.04	80	1427	7.14	7.18	82	1466	7.33	6534	980	4.90	0.08	83	0.42	12.73	19.91
40 "	25990	200		10	0.0	0.00	0.04	80	2083	10.41	10.45	82	2139	10.70	9536	1430	7.15	0.12	136	0.68	18.65	29.11
Tube																						
42 "	19870	200		10	0.0	0.00	0.04	80	1592	7.96	8.00	82	1636	8.18	7290	1094	5.47	0.09	144	0.72	14.46	22.46

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS +/-	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION +/-	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL $/ YR	TOTAL $/ HOUR	TOTAL COSTS $/HR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Potato Planter with fertilizer attachment																						
2 row	14138	60	90	15	0.0	0.00	0.04	32	299	4.99	5.03	90	852	14.20	4083	612	10.21	0.18	53	0.88	25.47	30.50
4 row	25178	60	180	15	0.0	0.00	0.04	32	533	8.88	8.92	90	1517	25.29	7271	1091	18.18	0.32	66	1.10	44.38	53.31
6 row	37126	60	270	15	0.0	0.00	0.04	32	786	13.10	13.14	90	2237	37.29	10722	1608	26.80	0.46	80	1.33	65.89	79.03
Potato Scooper																						
20 row	14213	140		10	0.0	0.00	0.03	49	691	4.94	4.97	82	1170	8.36	5215	782	5.59	0.10	35	0.25	14.29	19.26
24 row	14889	140		10	0.0	0.00	0.03	49	724	5.17	5.20	82	1226	8.75	5463	819	5.85	0.10	35	0.25	14.96	20.16
Potato Seed Cutter																						
36 "	9400	100		10	0.0	0.00	0.03	30	285	2.85	2.88	82	774	7.74	3449	517	5.17	0.09	35	0.35	13.35	16.23
Sugar Beet Planter																						
2 row	1360	80	150	15	0.0	0.00	0.05	46	42	0.52	0.57	90	82	1.02	499	75	0.94	0.02	30	0.38	2.35	2.92
4 row	2720	80	270	15	0.0	0.00	0.05	46	84	1.05	1.10	90	164	2.05	998	150	1.87	0.03	41	0.51	4.47	5.56
6 row	4080	80	410	15	0.0	0.00	0.05	46	126	1.57	1.62	90	246	3.07	1497	225	2.81	0.05	43	0.54	6.47	8.09
8 row	5440	80	550	15	0.0	0.00	0.05	46	167	2.09	2.14	90	328	4.10	1996	299	3.74	0.06	53	0.66	8.57	10.71

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS +/-	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL VAR. PER HOUR	FIXED COSTS: DEPRECIATION +/-	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL FIX PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sugar Beet Harvester																						
Rake & Whip																						
2 row	19950	180	200	10	0.0	0.00	0.07	51	1009	5.61	5.68	82	1642	9.12	7320	1098	6.10	0.11	121	0.67	16.00	21.68
3 row	21950	180	320	10	0.0	0.00	0.07	51	1110	6.17	6.24	82	1807	10.04	8053	1208	6.71	0.12	149	0.83	17.69	23.93
4 row	23000	180	400	10	0.0	0.00	0.07	51	1164	6.46	6.53	82	1893	10.52	8439	1266	7.03	0.12	182	1.01	18.68	25.27
6 row	27500	180	480	10	0.0	0.00	0.07	51	1391	7.73	7.80	82	2264	12.58	10090	1513	8.41	0.15	222	1.23	27.36	30.16
Ferris Wheel																						
3 row	40500	180	320	10	0.0	0.00	0.07	51	2049	11.38	11.45	82	3334	18.52	14859	2229	12.38	0.21	149	0.83	31.95	43.40
4 row	41500	180	400	10	0.0	0.00	0.07	51	2100	11.66	11.73	82	3416	18.98	15226	2284	12.69	0.22	182	1.01	32.90	44.63
6 row	49200	180	480	10	0.0	0.00	0.07	51	2489	13.83	13.90	82	4050	22.50	18051	2708	15.04	0.26	222	1.23	39.04	52.94
Sugar Beet Thinner																						
6 row	16000	100	280	10	0.0	0.00	0.04	22	355	3.55	3.59	82	1317	13.17	5870	881	8.81	0.15	36	0.36	22.49	26.08
Sugar Beet Top Saver																						
3 row	7895	130	200	10	0.0	0.00	0.04	32	228	1.75	1.79	82	584	4.49	2603	390	3.00	0.05	40	0.31	7.86	9.65
4 row	7695	130	260	10	0.0	0.00	0.04	32	247	1.90	1.94	82	633	4.87	2823	423	3.26	0.06	48	0.37	8.56	10.49
6 row	10370	130	300	10	0.0	0.00	0.04	32	333	2.56	2.60	82	854	6.57	3805	571	4.39	0.08	59	0.45	11.49	14.09

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sugar Beet Defoliator																						
4 row	11950	130	300	10	0.0	0.00	0.04	24	290	2.23	2.27	82	984	7.57	4384	658	5.06	0.09	73	0.56	13.27	15.54
6 row	15750	130	420	10	0.0	0.00	0.04	24	382	2.94	2.98	82	1296	9.97	5779	867	6.67	0.12	78	0.60	17.36	20.33
Bean Cutter																						
6 Row																						
24"	4885	100		10	0.0	0.00	0.03	30	148	1.48	1.51	82	402	4.02	1792	269	2.69	0.05	35	0.35	7.11	8.62
30"	5775	100		10	0.0	0.00	0.03	30	175	1.75	1.78	82	475	4.75	2119	318	3.18	0.06	35	0.35	8.34	10.12
8 Row																						
24"	6700	100		10	0.0	0.00	0.03	30	203	2.03	2.06	82	552	5.52	2458	369	3.69	0.06	35	0.35	9.62	11.68
30"	6825	100		10	0.0	0.00	0.03	30	207	2.07	2.10	82	562	5.62	2504	376	3.76	0.07	35	0.35	9.79	11.89
Row Crop Sprayer																						
125 gal.																						
6 row	1595	60	360	15	0.0	0.00	0.03	26	28	0.46	0.49	90	96	1.60	461	69	1.15	0.02	10	0.17	2.94	3.43
8 row	1852	60	490	15	0.0	0.00	0.03	26	32	0.54	0.57	90	112	1.86	535	80	1.34	0.02	10	0.17	3.39	3.96
200 gal.																						
6 row	2000	60	360	15	0.0	0.00	0.03	26	35	0.58	0.61	90	121	2.01	578	87	1.44	0.03	10	0.17	3.64	4.26
8 row	2244	60	490	15	0.0	0.00	0.03	26	39	0.65	0.68	90	135	2.25	648	97	1.62	0.03	10	0.17	4.07	4.75

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
300 gal.																						
8 row	2269	60	490	15	0.0	0.00	0.03	26	40	0.66	0.69	90	137	2.28	655	98	1.64	0.03	10	0.17	4.11	4.80
10 row	2649	60	610	15	0.0	0.00	0.03	26	46	0.77	0.80	90	160	2.66	765	115	1.91	0.03	12	0.20	4.81	5.61
12 row	2911	60	730	15	0.0	0.00	0.03	26	51	0.85	0.88	90	175	2.92	841	126	2.10	0.04	12	0.20	5.26	6.14
Corn Planters available in 30" to 40" width																						
Drawn																						
Narrow 4 row	8554	80	180	15	0.0	0.00	0.05	46	263	3.29	3.34	90	516	6.44	2470	371	4.63	0.08	41	0.51	11.67	15.01
Wide 4 row	8554	80	225	15	0.0	0.00	0.05	46	263	3.29	3.34	90	516	6.44	2470	371	4.63	0.08	41	0.51	11.67	15.01
Narrow 6 row	12251	80	270	15	0.0	0.00	0.07	46	377	4.71	4.78	90	738	9.23	3538	531	6.63	0.11	46	0.58	16.55	21.33
Wide 6 row	15036	80	315	15	0.0	0.00	0.07	46	463	5.78	5.85	90	906	11.33	4342	651	8.14	0.14	46	0.58	20.19	26.04
Narrow 8 row	17033	80	360	15	0.0	0.00	0.10	46	524	6.55	6.65	90	1027	12.83	4919	738	9.22	0.16	53	0.66	22.88	29.53
Wide 8 row	17890	80	410	15	0.0	0.00	0.10	46	550	6.88	6.98	90	1078	13.48	5167	775	9.69	0.17	53	0.66	23.99	30.98
12 row	27975	80	500	15	0.0	0.00	0.12	46	861	10.76	10.88	90	1686	21.07	8079	1212	15.15	0.26	58	0.72	37.21	48.09

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Folding Wing																						
8 row	32375	80	360	15	0.0	0.00	0.10	46	996	12.45	12.55	90	1951	24.39	9324	1399	17.48	0.30	53	0.66	42.84	55.39
Narrow 12 row	38756	80	500	15	0.0	0.00	0.12	46	1192	14.91	15.03	90	2336	29.20	11162	1674	20.93	0.36	58	0.72	51.21	66.24
Wide 12 row	51122	80	550	15	0.0	0.00	0.12	46	1573	19.66	19.78	90	3081	38.51	14723	2208	27.61	0.48	58	0.72	67.32	87.10
16 row	57111	80	600	15	0.0	0.00	0.14	46	1757	21.96	22.10	90	3442	43.02	16448	2467	30.84	0.53	63	0.79	75.19	97.29
18 row	64545	80	700	15	0.0	0.00	0.16	46	1986	24.82	24.98	90	3890	48.62	18589	2788	34.85	0.60	68	0.85	84.93	109.92
24 row	89290	80	900	15	0.0	0.00	0.20	46	2747	34.34	34.54	90	5381	67.26	25716	3857	48.22	0.84	78	0.97	117.29	151.83
"O" Till																						
4 row	10969	80	180	15	0.0	0.00	0.05	46	337	4.22	4.27	90	661	8.26	3159	474	5.92	0.10	41	0.51	14.80	19.07
6 row	15327	80	270	15	0.0	0.00	0.07	46	472	5.89	5.96	90	924	11.55	4414	662	8.28	0.14	46	0.58	20.54	26.51
8 row	19773	80	360	15	0.0	0.00	0.10	46	608	7.60	7.70	90	1192	14.90	5695	854	10.68	0.19	53	0.66	26.42	34.13

Note: Narrow is 35" - Wide is 40"

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Maxi - Emerg																						
6 row	11500	80	270	15	0.0	0.00	0.07	46	354	4.42	4.49	90	693	8.66	3321	498	6.23	0.11	46	0.58	15.57	20.07
8 row	15700	80	260	15	0.0	0.00	0.10	46	483	6.04	6.14	90	946	11.83	4534	680	8.50	0.15	53	0.66	21.14	27.28
12 row	25800	80	500	15	0.0	0.00	0.12	46	794	9.92	10.04	90	1555	19.44	7451	1118	13.97	0.24	58	0.72	34.37	44.42
Corn Headers																						
For Combines																						
4 row	15000	120		15	0.0	0.00	0.05	69	691	5.76	5.81	91	910	7.59	4332	650	5.41	0.09	13	0.11	13.20	19.02
6 row	19500	120		15	0.0	0.00	0.07	69	899	7.49	7.56	91	1184	9.86	5632	845	7.04	0.12	17	0.14	17.17	24.73
8 row	25400	120		15	0.0	0.00	0.09	69	1171	9.76	9.85	91	1542	12.85	7336	1100	9.17	0.16	20	0.17	22.34	32.19
For Forage Harvesters																						
1 row	2800	120		15	0.0	0.00	0.05	69	129	1.08	1.13	91	170	1.42	809	121	1.01	0.02	13	0.11	2.55	3.68
2 row	4100	120		15	0.0	0.00	0.07	69	189	1.57	1.64	91	249	2.07	1184	178	1.48	0.03	17	0.14	3.72	5.37
3 row	8100	120		15	0.0	0.00	0.09	69	373	3.11	3.20	91	492	4.10	2339	351	2.92	0.05	20	0.17	7.24	10.44

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HAY MACHINERY																						
Balers																						
PTO Drive																						
Standard 61" Under	9750	120	200	15	0.0	0.00	0.07	51	329	2.74	2.81	91	592	4.93	2649	397	3.31	0.06	68	0.57	8.87	11.68
Heavy-Duty 70" Over	10752	120	200	15	0.0	0.00	0.07	51	363	3.02	3.09	91	653	5.44	2921	438	3.65	0.06	68	0.57	9.72	12.81
Heavy Duty 70"	13913	120	200	15	0.0	0.00	0.07	51	469	3.91	3.98	91	844	7.04	3780	567	4.73	0.08	68	0.57	12.41	16.39
Custom 16 x 18"	14200	120	200	15	0.0	0.00	0.07	51	479	3.99	4.06	91	862	7.18	3858	579	4.82	0.08	72	0.60	12.69	16.75
Round under 5' (900 lb)	12470	120	200	15	0.0	0.00	0.07	51	421	3.50	3.57	91	757	6.31	3388	508	4.24	0.07	72	0.60	11.22	14.79
over 5' (1500 lb)	14799	120	200	15	0.0	0.00	0.07	51	499	4.16	4.23	91	898	7.48	4021	603	5.03	0.09	72	0.60	13.20	17.43
Self-propelled baler--Gasoline	42000	120	200	15	7.0	8.96	1.34	51	1417	11.80	22.11	91	2549	21.24	11411	1712	14.26	0.25	83	0.69	36.45	58.55
Bale Elevators																						
16'	430	120		15	0.0	0.00	0.03	51	15	0.12	0.15	91	26	0.22	117	18	0.15	0.00	15	0.13	0.49	0.64
20'	530	120		15	0.0	0.00	0.03	51	18	0.15	0.18	91	32	0.27	144	22	0.18	0.00	15	0.13	0.58	0.76
24'	582	120		15	0.0	0.00	0.03	51	20	0.16	0.19	91	35	0.29	158	24	0.20	0.00	15	0.13	0.62	0.81

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Extension for bale elevators																						
4'	78	120		15	0.0	0.00		51	3	0.02	0.02	91	5	0.04	21	3	0.03	0.00		0.00	0.07	0.09
8'	135	120		15	0.0	0.00		51	5	0.04	0.04	91	8	0.07	37	6	0.05	0.00		0.00	0.11	0.15
10'	157	120		15	0.0	0.00		51	5	0.04	0.04	91	10	0.08	43	6	0.05	0.00		0.00	0.13	0.18
12'	183	120		15	0.0	0.00		51	6	0.05	0.05	91	11	0.09	50	7	0.06	0.00		0.00	0.16	0.21
16'	237	120		15	0.0	0.00		51	8	0.07	0.07	91	14	0.12	64	10	0.08	0.00		0.00	0.20	0.27
Undercarriage for bale elevators																						
24'	198	120		15	0.0	0.00		51	7	0.06	0.06	91	12	0.10	54	8	0.07	0.00		0.00	0.17	0.22
36'	389	120		15	0.0	0.00		51	13	0.11	0.11	91	24	0.20	106	16	0.13	0.00		0.00	0.33	0.44
36'	607	120		15	0.0	0.00		51	20	0.17	0.17	91	37	0.31	165	25	0.21	0.00		0.00	0.52	0.69
Bale Stooker																						
Automatic																						
6 bale	1194	120		15	0.0	0.00		63	50	0.42	0.42	90	72	0.60	324	49	0.41	0.01	25	0.21	1.22	1.64
Manual																						
6 bale	297	120		15	0.0	0.00		63	13	0.10	0.10	90	18	0.15	81	12	0.10	0.00	15	0.13	0.38	0.48
10 bale	330	120		15	0.0	0.00		63	14	0.12	0.12	90	20	0.17	90	13	0.11	0.00	16	0.13	0.41	0.53
15 bale	800	120		15	0.0	0.00		63	34	0.28	0.28	90	48	0.40	217	33	0.27	0.00	18	0.15	0.83	1.11

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Bale Wagon																						
55 bale	9500	120		15	0.0	0.00	0.06	51	320	2.67	2.73	90	573	4.77	2744	412	3.43	0.06	93	0.78	9.04	11.77
70 bale	12200	120		15	0.0	0.00	0.06	51	411	3.43	3.49	90	735	6.13	3523	529	4.40	0.08	109	0.91	11.52	15.00
90 bale	14200	120		15	0.0	0.00	0.06	51	479	3.99	4.05	90	856	7.13	4101	615	5.13	0.09	139	1.16	13.50	17.56
104 bale	17200	120		15	0.0	0.00	0.06	51	580	4.83	4.89	90	1037	8.64	4967	745	6.21	0.11	139	1.16	16.11	21.01
160 bale	26100	120		15	0.0	0.00	0.06	51	880	7.34	7.40	90	1573	13.11	7538	1131	9.42	0.16	139	1.16	23.85	31.25
Self-propelled Bale Wagon gasoline engine																						
89 bale	58300	120	220	15	7.0	8.96	1.34	51	1966	16.39	26.69	90	3514	29.28	16837	2526	21.05	0.36	149	1.24	51.93	78.62
160 bale	67000	120	220	15	8.0	10.24	1.54	51	2260	18.83	30.61	90	4038	33.65	19350	2902	24.19	0.42	177	1.47	59.73	90.34
Round Bale Mover for large round bales																						
4 bale	3200	60		15	0.0	0.00	0.04	19	41	0.68	0.72	90	193	3.21	924	139	2.31	0.04	15	0.25	5.81	6.54
6 bale	7950	60		15	0.0	0.00	0.04	19	102	1.69	1.73	90	479	7.99	2296	344	5.74	0.10	93	1.55	15.37	17.11
12 bale	11270	60		15	0.0	0.00	0.04	19	144	2.40	2.44	90	679	11.32	3255	488	8.14	0.14	184	3.07	22.66	25.11

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/=	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/=	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Forage Box																						
self unloading with running gear																						
600 bu.	9308	160		15	0.0	0.00	0.04	76	470	2.94	2.98	91	565	3.53	2529	379	2.37	0.04	56	0.35	6.29	9.27
Forage Blower																						
under 56 "	3133	120		15	0.0	0.00	0.04	69	144	1.20	1.24	90	189	1.57	905	136	1.13	0.02	16	0.13	2.86	4.10
56 "	3400	120		15	0.0	0.00	0.04	69	157	1.31	1.35	90	205	1.71	982	147	1.23	0.02	16	0.13	3.09	4.44
over 56 "	3826	120		15	0.0	0.00	0.04	69	176	1.47	1.51	90	231	1.92	1105	166	1.38	0.02	16	0.13	3.46	4.97
Forage Blower Processor																						
1	8745	120		15	0.0	0.00	0.04	69	403	3.36	3.40	90	527	4.39	2526	379	3.16	0.05	16	0.13	7.74	11.14
Forage Chopper																						
6 '	6400	120	370	15	0.0	0.00	0.03	69	295	2.46	2.49	90	386	3.21	1848	277	2.31	0.04	40	0.33	5.90	8.39
Forage Harvester																						
PTO																						
under 20 "	16748	120	130	15	0.0	0.00	0.04	69	772	6.43	6.47	91	1016	8.47	4837	726	6.05	0.10	36	0.30	14.92	21.39
over 20 "	22060	120	160	15	0.0	0.00	0.04	69	1017	8.47	8.51	91	1339	11.16	6371	956	7.96	0.14	40	0.33	19.59	28.11

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Forage Harvester - Self - Propelled																						
hydrostatic drive																						
HP																						
170	85000	120	160	15	8.0	10.24	1.54	69	3918	32.65	44.43	91	5159	42.99	23094	3464	28.87	0.50	48	0.40	72.76	117.19
225-250	90750	120	160	15	12.0	15.36	2.30	69	4183	34.86	52.52	91	5508	45.90	24657	3699	30.82	0.53	51	0.42	77.68	130.20
Hay Stacker																						
1 Ton	10500	120		10	0.0	0.00	0.03	36	377	3.14	3.17	82	864	7.20	4155	623	5.19	0.09	53	0.44	12.93	16.10
3 Ton	23135	120		10	0.0	0.00	0.03	36	831	6.92	6.95	82	1904	15.87	9155	1373	11.44	0.20	53	0.44	27.95	34.90
6 Ton	32500	120		10	0.0	0.00	0.03	36	1167	9.72	9.75	82	2675	22.29	12860	1929	16.08	0.28	53	0.44	39.09	48.84
Hay Stack Mover																						
1.5 Ton	1750	120		15	0.0	0.00	0.05	63	74	0.62	0.67	90	105	0.88	505	76	0.63	0.01	24	0.20	1.72	2.39
4 Ton	4400	120		15	0.0	0.00	0.05	63	186	1.55	1.60	90	265	2.21	1271	191	1.59	0.03	66	0.55	4.38	5.97
6 Ton	5995	120		15	0.0	0.00	0.05	63	253	2.11	2.16	90	361	3.01	1731	260	2.16	0.04	81	0.67	5.89	8.05
8 Ton	7000	120		15	0.0	0.00	0.05	63	296	2.46	2.51	90	422	3.52	2022	303	2.53	0.04	84	0.70	6.79	9.30
10 Ton	13200	120		15	0.0	0.00	0.05	63	557	4.64	4.69	90	796	6.63	3812	572	4.77	0.08	91	0.76	12.24	16.93

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS +/-	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION +/-	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mower																						
Integral																						
7'	2900	120	400	15	0.0	0.00	0.03	63	122	1.02	1.05	90	175	1.46	939	126	1.05	0.02	7	0.06	2.58	3.63
9'	3108	120	520	15	0.0	0.00	0.03	63	131	1.09	1.12	90	187	1.56	899	135	1.12	0.02	7	0.06	2.76	3.88
Trailed																						
7'	3500	120	400	15	0.0	0.00	0.03	63	148	1.23	1.26	90	211	1.76	1011	152	1.26	0.02	7	0.06	3.10	4.36
9'	3735	120	520	15	0.0	0.00	0.03	63	158	1.31	1.34	90	225	1.88	1079	162	1.35	0.02	7	0.06	3.31	4.65
Mower Conditioner PTO driven																						
9'	9960	120	500	15	0.0	0.00	0.05	63	421	3.50	3.55	90	600	5.00	2876	431	3.60	0.06	48	0.40	9.06	12.61
10'	11141	120	550	15	0.0	0.00	0.05	63	470	3.92	3.97	90	671	5.60	3218	483	4.02	0.07	54	0.45	10.14	14.11
12'	14707	120	650	15	0.0	0.00	0.05	63	621	5.18	5.23	90	886	7.39	4247	637	5.31	0.09	66	0.55	13.34	18.56
14'	15245	120	760	15	0.0	0.00	0.05	63	644	5.36	5.41	90	919	7.66	4403	660	5.50	0.10	73	0.61	13.86	19.28
Mower Conditioner Self - Propelled																						
1	35000	120	760	15	12.0	15.36	2.30	63	1478	12.32	29.98	90	2094	17.45	10699	1605	13.37	0.23	61	0.51	31.57	61.55

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVG VALUE	INTEREST $/ YR	INTEREST $ HR	INS. $ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL FIXED HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Reel Rake																						
Integral 9 '	2492	120	440	15	0.0	0.00	0.03	63	105	0.88	0.91	90	150	1.25	770	116	0.79	0.02	20	0.17	2.33	3.24
Trailed 9 '	3051	120	440	15	0.0	0.00	0.03	63	129	1.07	1.10	90	184	1.53	881	132	1.10	0.02	24	0.20	2.85	3.95
Mounted																						
Right 9	3820	120	440	15	0.0	0.00	0.03	63	161	1.34	1.37	90	230	1.92	1103	165	1.38	0.02	26	0.22	3.54	4.91
Left 9	4048	120	440	15	0.0	0.00	0.03	63	172	1.43	1.46	90	245	2.04	1175	176	1.47	0.03	28	0.22	3.75	5.22
Fingerwheel Rake																						
7.5'	1291	120	370	15	0.0	0.00	0.03	63	55	0.45	0.48	90	78	0.65	373	56	0.47	0.01	10	0.08	1.21	1.69
9 '	1638	120	440	15	0.0	0.00	0.03	63	69	0.58	0.61	90	99	0.82	473	71	0.59	0.01	15	0.13	1.55	2.16
10.5'	2912	120	550	15	0.0	0.00	0.03	63	123	1.02	1.05	90	175	1.46	841	126	1.05	0.02	18	0.15	2.68	3.74
13 '	3462	120	710	15	0.0	0.00	0.03	63	146	1.22	1.25	90	209	1.74	1000	150	1.25	0.02	25	0.21	3.22	4.47
18 '	3873	120	880	15	0.0	0.00	0.03	63	164	1.36	1.39	90	233	1.95	1119	168	1.40	0.02	30	0.25	3.62	5.01
22 '	4038	120	1080	15	0.0	0.00	0.03	63	171	1.42	1.45	90	243	2.03	1166	175	1.46	0.03	36	0.30	3.81	5.26

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS +/-	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION +/-	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
HARVEST MACHINERY																						
Combines																						
Self - Propelled 1/																						
Class 1 2/	68378	120		12	6.0	7.50	1.12	38	2179	18.16	26.78	85	4856	40.47	22264	3340	27.83	0.48	98	0.82	69.60	96.38
Class 2	92832	120		12	7.0	8.75	1.31	38	2958	24.65	34.72	85	6593	54.94	30226	4534	37.78	0.65	133	1.11	94.49	129.20
Class 3	109365	120		12	8.0	10.00	1.50	38	3198	26.65	38.15	85	7128	59.40	32679	4902	40.85	0.71	143	1.19	102.15	140.30
Class 4	107266	120		12	9.0	11.25	1.69	38	3418	28.49	41.42	85	7618	63.49	34926	5239	43.66	0.76	157	1.31	109.21	150.63
Axial Separation 3/																						
Engine HP																						
135-160	91800	120		12	7.0	8.75	1.31	38	2925	24.38	34.44	85	6520	54.33	29890	4484	37.36	0.65	173	1.03	93.37	127.81
161-180	102150	120		12	8.0	10.00	1.50	38	3255	27.13	38.63	85	7255	60.46	33260	4989	41.58	0.72	133	1.11	103.86	142.49
181-194	114300	120		12	9.0	11.25	1.69	38	3643	30.35	43.29	85	8118	67.65	37216	5582	46.52	0.81	143	1.19	116.17	159.46
195 over	133350	120		12	10.0	12.50	1.87	38	4250	35.41	49.79	85	9471	78.92	43419	6513	54.27	0.94	157	1.31	135.45	185.23
PTO driven 4/																						
Class 1	43674	120		12	0.0	0.00	0.07	38	1392	11.60	11.67	85	3102	25.85	14220	2133	17.78	0.31	133	1.11	45.04	56.71
Class 2	50123	120		12	0.0	0.00	0.07	38	1597	13.31	13.38	85	3560	29.67	16320	2448	20.40	0.35	143	1.19	51.61	64.99
Class 3	64783	120		12	0.0	0.00	0.07	38	2065	17.20	17.27	85	4601	38.34	21093	3164	26.37	0.46	157	1.31	66.47	83.75

1/ With platform pickup, belt pickup, cab with heater, diesel engine, chopper, monitors

2/ See page for evaluation of size grouping

3/ With diesel engine, cab with heater and air conditioning, spreader, monitors

4/ With stone trap, chopper, monitors

TABLE 6

IMPLEMENT	AVE. LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS o/o	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION o/o	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Combine Pickups																						
with rubber or plastic teeth																						
Draper																						
8 '	2560	120		12	0.0	0.00	0.03	38	82	0.68	0.71	85	182	1.52	834	125	1.04	0.02	10	0.08	2.66	3.37
9 '	3027	120		12	0.0	0.00	0.03	38	96	0.80	0.83	85	215	1.79	986	148	1.23	0.02	10	0.08	3.13	3.96
10 '	3389	120		12	0.0	0.00	0.03	38	108	0.90	0.93	85	241	2.01	1103	166	1.38	0.02	11	0.09	3.50	4.43
11 '	3500	120		12	0.0	0.00	0.03	38	112	0.93	0.96	85	249	2.07	1140	171	1.42	0.02	11	0.09	3.61	4.57
12 '	3603	120		12	0.0	0.00	0.03	38	115	0.96	0.99	85	256	2.13	1173	176	1.47	0.03	13	0.11	3.73	4.72
Drum Pickup																						
8 '	2120	120		12	0.0	0.00	0.03	38	68	0.56	0.59	85	151	1.25	690	104	0.86	0.01	10	0.08	2.22	2.81
10 '	2310	120		12	0.0	0.00	0.03	38	74	0.61	0.64	85	164	1.37	752	113	0.94	0.02	11	0.09	2.42	3.06
12 '	2550	120		12	0.0	0.00	0.03	38	81	0.68	0.71	85	181	1.51	830	125	1.04	0.02	13	0.11	2.67	3.38
14 '	2945	120		12	0.0	0.00	0.03	38	94	0.78	0.81	85	209	1.74	959	144	1.20	0.02	13	0.11	3.07	3.88
Swathers																						
PTO																						
15 '	5683	100	530	15	0.0	0.00	0.05	49	186	1.86	1.91	90	340	3.40	1737	261	2.61	0.05	53	0.53	6.58	8.49
18 '	6613	100	640	15	0.0	0.00	0.05	49	216	2.16	2.21	90	396	3.96	2022	303	3.03	0.05	63	0.63	7.67	9.89
21 '	7574	100	750	15	0.0	0.00	0.06	49	248	2.48	2.54	90	453	4.53	2315	347	3.47	0.06	72	0.76	8.80	11.33
25 '	8543	100	860	15	0.0	0.00	0.06	49	279	2.79	2.85	90	511	5.11	2612	392	3.92	0.07	84	0.84	9.94	12.79

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS +/-	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION +/-	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Self - Propelled																						
12'	18773	100	570	15	2.0	2.56	0.38	49	614	6.14	9.09	90	1123	11.23	5739	861	8.61	0.15	61	0.61	20.60	29.69
15'	18308	100	670	15	3.1	3.97	0.60	49	599	5.99	10.55	90	1096	10.96	5597	840	8.40	0.15	66	0.66	20.16	30.71
18'	19988	100	770	15	3.4	4.35	0.65	49	654	6.54	11.54	90	1196	11.96	6110	917	9.17	0.16	71	0.71	22.00	33.54
21'	20139	100	910	15	3.5	4.48	0.67	49	659	6.59	11.74	90	1205	12.05	6156	923	9.23	0.16	83	0.83	22.28	34.02

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
IRRIGATION EQUIPMENT																						
Irrigation Systems - delivered and set up																						
Wheel Move - ¼ mile - 5" diameter tubing - 40' intervals, self-levelling risers																						
58" wheel	9032	1000	80	10	0.0	0.00		23	207	0.21	0.21	81	733	0.73	2941	441	0.44	0.01		0.00	1.18	1.39
76" wheel	10271	1000	80	10	0.0	0.00		23	236	0.24	0.24	81	833	0.83	3344	502	0.50	0.01		0.00	1.34	1.58
Complete Takedown - 5" diameter tubing																						
58"	11290	1000	80	10	0.0	0.00		23	259	0.26	0.26	81	916	0.92	3676	551	0.55	0.01		0.00	1.48	1.74
76"	14266	1000	80	10	0.0	0.00		23	327	0.33	0.33	81	1157	1.16	4645	697	0.70	0.01		0.00	1.87	2.19
Centre Pivot - ¼ mile - delivered and set up on one circle																						
Water Drive - 10 Tower	37669	1000	135	15	0.0	0.00	0.04	40	1017	1.02	1.06	90	2254	2.25	12265	1840	1.84	0.03		0.00	4.13	5.18
7 Tower	61333	1000	135	15	0.0	0.00	0.04	40	1656	1.66	1.70	90	3670	3.67	19970	2996	3.00	0.05		0.00	6.72	8.41
Electric Drive	49000	1000	135	15	0.0	0.00	0.04	40	1323	1.32	1.36	90	2932	2.93	15954	2393	2.39	0.04		0.00	5.37	6.73
Long Line - 2600' - electric drive																						
20 Tower	115000	1000	500	15	0.0	0.00	0.07	40	3104	3.10	3.17	90	6882	6.88	37444	5617	5.62	0.10		0.00	12.60	15.77
Corner System Attachment	21700	1000	20	15	0.0	0.00	0.02	40	586	0.59	0.61	90	1299	1.30	7066	1060	1.06	0.02		0.00	2.38	2.98
Travelling Gun - with hose and cable or PE pipe and reel																						
¼ MILE	29003	1000	100	10	0.0	0.00	0.03	23	666	0.67	0.70	81	2353	2.35	9443	1417	1.42	0.02		0.00	3.79	4.49

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Aluminum Main Lines - ¼ mile - c/w couplers @30' and valves @60'																						
6" diameter .058 wall	5299	1000		15	0.0	0.00		40	143	0.14	0.14	90	317	0.32	1725	259	0.26	0.00		0.00	0.58	0.72
7" diameter .064 wall	7278	1000		15	0.0	0.00		40	196	0.20	0.20	90	436	0.44	2370	355	0.36	0.01		0.00	0.80	0.99
8" diameter .064 wall	7985	1000		15	0.0	0.00		40	216	0.22	0.22	90	478	0.48	2600	390	0.39	0.01		0.00	0.87	1.09
8" diameter .072 wall	8699	1000		15	0.0	0.00		40	235	0.23	0.23	90	521	0.52	2832	425	0.42	0.01		0.00	0.95	1.19
10" diameter .064 wall	10696	1000		15	0.0	0.00		40	289	0.29	0.29	90	640	0.64	3483	522	0.52	0.01		0.00	1.17	1.46
10" diameter .072 wall	12778	1000		15	0.0	0.00		40	345	0.34	0.34	90	765	0.76	4161	624	0.62	0.01		0.00	1.40	1.74
Pumping Units																						
Electric @4.61¢/kwh																						
700 -900 GPM	4805	1000	160	15	37.0	1.71	0.26	40	130	0.13	2.09	90	288	0.29	1565	235	0.23	0.00		0.00	0.53	2.62
1000 -1400 GPM	7486	1000	240	15	60.0	2.77	0.41	40	202	0.20	3.38	90	448	0.45	2437	366	0.37	0.01		0.00	0.82	4.20
Natural Gas @$2.35/mcf																						
700 -900 GPM	8261	1000	160	8	0.5	1.18	0.18	17	173	0.17	1.52	76	784	0.78	2690	403	0.40	0.01		0.00	1.19	2.72
1000 -1400 GPM	13123	1000	240	8	0.8	1.76	0.26	17	275	0.28	2.30	76	1245	1.25	4273	641	0.64	0.01		0.00	1.90	4.20
Propane @63.7¢/gal.																						
700 -900 GPM	8286	1000	160	8	4.0	2.55	0.38	17	174	0.17	3.10	76	786	0.79	2698	405	0.40	0.01		0.00	1.20	4.30
1000 -1400 GPM	13148	1000	240	8	6.0	3.82	0.57	17	276	0.28	4.67	76	1248	1.25	4281	642	0.64	0.01		0.00	1.90	6.57

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Diesel @$1.25/gal.																						
700 -900 GPM	15672	1000	160	12	2.3	2.88	0.43	30	387	0.39	3.69	85	1113	1.11	5106	766	0.77	0.01		0.00	1.89	5.59
1000 -1400 GPM	19207	1000	240	12	2.3	2.88	0.43	30	474	0.47	3.78	85	1364	1.36	6258	939	0.94	0.02		0.00	2.32	6.10
V-Ditcher Pull Type																						
PTO																						
6 '	985	100		15	0.0	0.00		30	19	0.19	0.19	90	59	0.59	284	43	0.43	0.01		0.00	1.03	1.22
7 '	1070	100		15	0.0	0.00		30	21	0.21	0.21	90	64	0.64	309	46	0.46	0.01		0.00	1.12	1.33
8 '	1165	100		15	0.0	0.00		30	23	0.23	0.23	90	70	0.70	336	50	0.50	0.01		0.00	1.22	1.45
11 '	5950	100		15	0.0	0.00		30	118	1.18	1.18	90	359	3.59	1718	258	2.58	0.04		0.00	6.21	7.38
3 PT Hitch																						
6 '	825	100		15	0.0	0.00		30	16	0.16	0.16	90	50	0.50	238	36	0.36	0.01		0.00	0.86	1.02
7 '	910	100		15	0.0	0.00		30	18	0.18	0.18	90	55	0.55	263	39	0.39	0.01		0.00	0.95	1.13
Land Plane																						
50' Span																						
8 ' blade	1286	100	250	15	0.0	0.00		30	25	0.25	0.25	90	78	0.78	371	56	0.56	0.01		0.00	1.34	1.60
10 ' blade	2598	100	300	15	0.0	0.00		30	51	0.51	0.51	90	157	1.57	750	113	1.13	0.02		0.00	2.71	3.22
12 ' blade	3975	100	350	15	0.0	0.00		30	79	0.79	0.79	90	240	2.40	1148	172	1.72	0.03		0.00	4.15	4.93
14 ' blade	4100	100	400	15	0.0	0.00		30	81	0.81	0.81	90	247	2.47	1184	178	1.78	0.03		0.00	4.28	5.09
16 ' blade	4950	100	450	15	0.0	0.00		30	98	0.98	0.98	90	298	2.98	1430	214	2.14	0.04		0.00	5.16	6.14

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Pipe Trailer - for ¼ mile of pipe																						
1	975	100		15	0.0	0.00		2	1	0.01	0.01	90	58	0.58	282	42	0.42	0.01		0.00	1.01	1.02

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/%	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/%	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
FEED & FEED HANDLING																						
Mixer Mill with bale shredder, hammer mill, bale feed over 125 bu.																						
to 80 bu.	6800	180	5	15	0.0	0.00	0.04	67	306	1.70	1.74	91	413	2.29	1848	277	1.54	0.03	30	0.17	4.03	5.76
81 - 100 bu.	8885	180	7	15	0.0	0.00	0.04	67	400	2.22	2.26	91	539	3.00	2414	362	2.01	0.03	35	0.19	5.24	7.50
101 - 125 bu.	12116	180	8	15	0.0	0.00	0.04	67	545	3.03	3.07	91	735	4.09	3292	494	2.74	0.05	42	0.23	7.11	10.18
150 bu.	14500	180	10	15	0.0	0.00	0.04	67	652	3.62	3.66	91	880	4.89	3940	591	3.28	0.06	56	0.31	8.54	12.20
Mixer Feeder Wagon (Bunk Feeder) with electronic scale																						
100-150 bu.	8888	350		15	0.0	0.00	0.05	226	1342	3.83	3.88	91	539	1.54	2415	362	1.03	0.02	26	0.07	2.67	6.55
151-200 bu.	9669	350		15	0.0	0.00	0.05	226	1459	4.17	4.22	91	587	1.68	2627	394	1.13	0.02	35	0.10	2.92	7.14
280 bu.	14904	350		15	0.0	0.00	0.05	226	2250	6.43	6.48	91	905	2.58	4049	607	1.74	0.03	41	0.12	4.47	10.94
Truck Mount																						
175 bu.	8995	350		15	0.0	0.00	0.05	226	1358	3.88	3.93	91	546	1.56	2444	367	1.05	0.02	41	0.12	2.74	6.67
280 bu.	12719	350		15	0.0	0.00	0.05	226	1920	5.49	5.54	91	772	2.21	3456	518	1.48	0.03	41	0.12	3.83	9.36

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Rollermill																						
8 x 6	738	240		10	0.0	0.00	0.03	76	56	0.23	0.26	83	62	0.26	246	37	0.15	0.00	5	0.02	0.43	0.70
10 x 6	1694	240		10	0.0	0.00	0.03	76	128	0.53	0.56	83	141	0.59	564	85	0.35	0.01	5	0.02	0.97	1.53
10 x 10	2166	240		10	0.0	0.00	0.03	76	164	0.68	0.71	83	181	0.75	722	108	0.45	0.01	5	0.02	1.23	1.95
10 x 20	4045	240		10	0.0	0.00	0.03	76	306	1.28	1.31	83	338	1.41	1348	202	0.84	0.01	5	0.02	2.29	3.59
16 x 18	5590	240		10	0.0	0.00	0.03	76	423	1.76	1.79	83	467	1.94	1863	279	1.16	0.02	5	0.02	3.15	4.94
16 x 24	6335	240		10	0.0	0.00	0.03	76	479	2.00	2.03	83	529	2.20	2111	317	1.32	0.02	5	0.02	3.57	5.59
Portable Mix Mill																						
10 x 18	2080	240		10	0.0	0.00	0.03	76	157	0.66	0.69	83	174	0.72	693	104	0.43	0.01	5	0.02	1.19	1.87
Tub Mill - PTO Drive																						
8- 15	16000	500		10	0.0	0.00	0.04	46	731	1.46	1.50	83	1336	2.67	5533	830	1.66	0.03	43	0.09	4.45	5.95
15 over	26500	500		10	0.0	0.00	0.04	46	1210	2.42	2.46	83	2213	4.43	9164	1375	2.75	0.05	48	0.10	7.32	9.78
Tub Mill - Engine Drive																						
8- 15	26740	500		10	0.1	0.15	0.02	46	1221	2.44	2.62	83	2233	4.47	9247	1387	2.77	0.05	43	0.09	7.37	9.99
15 over	34200	500		10	0.1	0.15	0.02	46	1562	3.12	3.30	83	2856	5.71	11826	1774	3.55	0.06	48	0.10	9.42	12.72

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL/HR	FUEL $/HR	LUBE $/HR	REPAIRS %	REPAIRS $/YR	REPAIRS $/HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/YR	DEPRECIATION $/HR	INTEREST AVE VALUE	INTEREST $/YR	INTEREST $/HR	INS $/HR	HOUSING $/YR	HOUSING $/HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Silage Loader																						
600 FT^3	7011	180		15	0.0	0.00	0.04	122	570	3.17	3.21	90	423	2.35	2424	364	2.02	0.04	16	0.09	4.49	7.70
700 FT^3	7523	180		15	0.0	0.00	0.04	122	612	3.40	3.44	90	453	2.52	2601	390	2.17	0.04	16	0.09	4.81	8.25
900 FT^3	10616	180		15	0.0	0.00	0.04	122	863	4.80	4.84	90	640	3.55	3671	551	3.06	0.05	16	0.09	6.76	11.59

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MISCELLANEOUS MACHINES																						
Skid - Steer Loaders																						
Gasoline																						
Engine HP																						
16-25	14915	400		15	1.5	1.92	0.29	51	507	1.27	3.47	90	893	2.23	4856	728	1.82	0.03	32	0.08	4.16	7.64
30-35	20228	400		15	2.4	3.07	0.46	51	687	1.72	5.25	90	1210	3.03	6586	988	2.47	0.04	34	0.08	5.62	10.87
36-40	26053	400		15	2.8	3.58	0.54	51	885	2.21	6.33	90	1559	3.90	8483	1272	3.18	0.06	38	0.09	7.23	13.56
Diesel																						
Engine HP																						
28-35	21953	400		15	1.5	1.88	0.28	51	746	1.86	4.02	90	1314	3.28	7148	1072	2.68	0.05	32	0.08	6.09	10.11
40-45	27354	400		15	2.0	2.50	0.37	51	929	2.32	5.20	90	1637	4.09	8906	1336	3.34	0.06	34	0.08	7.57	12.77
50-60	33376	400		15	2.6	3.25	0.49	51	1134	2.83	6.57	90	1997	4.99	10867	1630	4.08	0.07	38	0.09	9.23	15.81
61-85	49516	400		15	3.5	4.38	0.66	51	1682	4.20	9.24	90	2963	7.41	16122	2418	6.05	0.10	40	0.10	13.66	22.89
Anhydrous Ammonia Applicator with 45' tool bar																						
1000 gal.	12879	80	2000	15	0.0	0.00		121	1035	12.93	12.93	90	776	9.70	3719	558	6.97	0.12		0.00	16.80	29.73
1450 gal.	15177	80	2500	15	0.0	0.00		121	1219	15.24	15.24	90	915	11.43	4383	657	8.22	0.14		0.00	19.79	35.04
Cultivator Kit																						
24 shank	1380	80	2000	15	0.0	0.00		121	111	1.39	1.39	90	83	1.04	399	60	0.75	0.01		0.00	1.80	3.19
48 shank	1920	80	2000	15	0.0	0.00		121	154	1.93	1.93	90	116	1.45	554	83	1.04	0.02		0.00	2.50	4.43

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Cold Flow Converter with splitter, hose accessories, shanks, shank clamps																						
32'	2200	80	200	15	0.0	0.00		121	177	2.21	2.21	90	133	1.66	635	95	1.19	0.02		0.00	2.87	5.08
Pneumatic Grain Mover (Suction Blower)																						
800 - 1100 bu/hr																						
3 point	8034	60	3000	15	0.0	0.00	0.03	19	103	1.71	1.74	91	488	8.13	2183	327	5.46	0.09	94	1.57	15.25	16.99
Trailer	8788	60	3000	15	0.0	0.00	0.03	19	112	1.87	1.90	91	533	8.89	2388	358	5.97	0.10	94	1.57	16.53	18.43
1200 - 1500 bu/hr	12500	60	3000	15	0.0	0.00	0.03	19	160	2.66	2.69	91	759	12.64	3396	509	8.49	0.15	94	1.57	22.85	25.54
2000 - 3000 bu/hr	16500	60	3000	15	0.0	0.00	0.03	19	211	3.51	3.54	91	1001	16.69	4483	672	11.21	0.19	94	1.57	29.66	33.20
Cattle Squeeze																						
Lever operated, less scale	1433	60		15	0.0	0.00		14	14	0.23	0.23	90	86	1.44	414	62	1.03	0.02	10	0.17	2.66	2.89
w/rack	1936	60		15	0.0	0.00		14	19	0.31	0.31	90	117	1.94	559	84	1.40	0.02	10	0.17	3.53	3.84
Portable	1763	60		15	0.0	0.00		14	17	0.28	0.28	90	106	1.77	509	76	1.27	0.02	10	0.17	3.23	3.52
Cattle Scale																						
Stationary	1050	60		15	0.0	0.00		14	10	0.17	0.17	90	63	1.05	303	45	0.76	0.01	159	2.65	4.48	4.64
Portable	1210	60		15	0.0	0.00		14	12	0.19	0.19	90	73	1.22	349	52	0.87	0.02	120	2.00	4.10	4.30

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Utility Grain Auger for permanent or semi-permanent location, no carriage, with motor mount and truck bracket																						
4" diameter																						
11'	112	40	210	15	0.0	0.00		11	1	0.02	0.02	91	7	0.17	30	5	0.11	0.00	0.00	0.00	0.29	0.31
16'	139	40	210	15	0.0	0.00		11	1	0.03	0.03	91	8	0.21	38	6	0.14	0.00	0.00	0.00	0.35	0.38
21'	163	40	210	15	0.0	0.00		11	1	0.03	0.03	91	10	0.25	44	7	0.17	0.00	0.00	0.00	0.42	0.45
10' extension	68	40	210	15	0.0	0.00		11	0	0.01	0.01	91	4	0.10	18	3	0.07	0.00	0.00	0.00	0.17	0.19
5" diameter																						
11'	162	40	450	15	0.0	0.00		11	1	0.03	0.03	91	10	0.25	44	7	0.17	0.00	0.00	0.00	0.41	0.44
16'	196	40	450	15	0.0	0.00		11	1	0.04	0.04	91	12	0.30	53	8	0.20	0.00	0.00	0.00	0.50	0.54
21'	234	40	450	15	0.0	0.00		11	2	0.04	0.04	91	14	0.36	64	10	0.24	0.00	0.00	0.00	0.60	0.64
10' extension	102	40	450	15	0.0	0.00		11	1	0.02	0.02	91	6	0.15	28	4	0.10	0.00	0.00	0.00	0.26	0.28
6" diameter																						
11'	165	60	620	15	0.0	0.00		19	2	0.04	0.04	91	10	0.17	45	7	0.11	0.00	0.00	0.00	0.28	0.32
16'	203	60	620	15	0.0	0.00		19	3	0.04	0.04	91	12	0.21	55	8	0.14	0.00	0.00	0.00	0.35	0.39
21'	244	60	620	15	0.0	0.00		19	3	0.05	0.05	91	15	0.25	66	10	0.17	0.00	0.00	0.00	0.42	0.47
10' extension	104	60	620	15	0.0	0.00		19	1	0.02	0.02	91	6	0.11	28	4	0.07	0.00	0.00	0.00	0.18	0.20
7" diameter																						
16'	315	60	850	15	0.0	0.00		19	4	0.07	0.07	91	19	0.32	86	13	0.21	0.00	0.00	0.00	0.54	0.60
5' extension	84	60	850	15	0.0	0.00		19	1	0.02	0.02	91	5	0.08	23	3	0.06	0.00	0.00	0.00	0.14	0.16
10' extension	124	60	850	15	0.0	0.00		19	2	0.03	0.03	91	8	0.13	34	5	0.08	0.00	0.00	0.00	0.21	0.24

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
8" diameter																						
16'	483	60	1185	15	0.0	0.00		19	6	0.10	0.10	91	29	0.49	131	20	0.33	0.01		0.00	0.82	0.93
5' extension	135	60	1185	15	0.0	0.00		19	2	0.03	0.03	91	8	0.14	37	6	0.09	0.00		0.00	0.23	0.26
10' extension	158	60	1185	15	0.0	0.00		19	2	0.03	0.03	91	10	0.16	43	6	0.11	0.00		0.00	0.27	0.30
Grain Auger																						
Motor Mount - with carriage, motor mount (less motor)																						
6" diameter																						
26'	840	60	620	15	0.0	0.00	0.03	19	11	0.18	0.21	91	51	0.85	228	34	0.57	0.01	29	0.48	1.91	2.12
31'	939	60	620	15	0.0	0.00	0.03	19	12	0.20	0.23	91	57	0.95	255	38	0.64	0.01	34	0.57	2.17	2.40
36'	1170	60	620	15	0.0	0.00	0.03	19	15	0.25	0.28	91	71	1.18	318	48	0.79	0.01	43	0.72	2.71	2.99
41'	1272	60	620	15	0.0	0.00	0.03	19	16	0.27	0.30	91	77	1.29	346	52	0.86	0.01	53	0.88	3.05	3.35
51'	1956	60	620	15	0.0	0.00	0.03	19	25	0.42	0.45	91	119	1.98	531	80	1.33	0.02	64	1.07	4.40	4.84
7" diameter																						
26'	907	60	850	15	0.0	0.00	0.03	19	12	0.19	0.22	91	55	0.92	246	37	0.62	0.01	29	0.48	2.03	2.25
31'	1134	60	850	15	0.0	0.00	0.03	19	14	0.24	0.27	91	69	1.15	308	46	0.77	0.01	34	0.57	2.50	2.77
36'	1307	60	850	15	0.0	0.00	0.03	19	17	0.28	0.31	91	79	1.32	355	53	0.89	0.02	43	0.72	2.94	3.25
41'	1446	60	850	15	0.0	0.00	0.03	19	18	0.31	0.34	91	88	1.46	393	59	0.98	0.02	53	0.88	3.35	3.68
46'	1571	60	850	15	0.0	0.00	0.03	19	20	0.33	0.36	91	95	1.59	427	64	1.07	0.02	59	0.98	3.66	4.02
51'	1801	60	850	15	0.0	0.00	0.03	19	23	0.38	0.41	91	109	1.82	489	73	1.22	0.02	64	1.07	4.13	4.55

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
8" diameter																						
36'	1298	60	1135	15	0.0	0.00	0.03	19	17	0.28	0.31	91	79	1.31	353	53	0.88	0.02	43	0.72	2.93	3.23
41'	1684	60	1135	15	0.0	0.00	0.03	19	22	0.36	0.39	91	102	1.70	458	69	1.14	0.02	53	0.88	3.75	4.14
46'	1975	60	1135	15	0.0	0.00	0.03	19	25	0.42	0.45	91	120	2.00	537	80	1.34	0.02	59	0.98	4.35	4.80
51'	2270	60	1135	15	0.0	0.00	0.03	19	29	0.48	0.51	91	138	2.30	617	93	1.54	0.03	64	1.07	4.93	5.45
Direct PTO Drive - with carriage																						
8" diameter																						
36'	1569	60	1135	15	0.0	0.00	0.03	19	20	0.33	0.36	91	95	1.59	426	64	1.07	0.02	43	0.72	3.39	3.75
41'	1861	60	1135	15	0.0	0.00	0.03	19	24	0.40	0.43	91	113	1.88	506	76	1.26	0.02	53	0.88	4.05	4.48
46'	2044	60	1135	15	0.0	0.00	0.03	19	26	0.44	0.47	91	124	2.07	555	83	1.39	0.02	59	0.98	4.46	4.93
51'	2174	60	1135	15	0.0	0.00	0.03	19	28	0.46	0.49	91	132	2.20	591	89	1.48	0.03	64	1.07	4.77	5.26
56'	2438	60	1135	15	0.0	0.00	0.03	19	31	0.52	0.55	91	148	2.47	662	99	1.66	0.03	73	1.22	5.37	5.92
61'	2590	60	1135	15	0.0	0.00	0.03	19	33	0.55	0.58	91	157	2.62	704	106	1.76	0.03	81	1.35	5.76	6.34
71'	2773	60	1135	15	0.0	0.00	0.03	19	35	0.59	0.62	91	168	2.81	753	113	1.88	0.03	94	1.57	6.29	6.91
10" diameter																						
41'	2322	60	3000	15	0.0	0.00	0.03	19	30	0.49	0.52	91	141	2.35	631	95	1.58	0.03	53	0.88	4.84	5.36
51'	2913	60	3000	15	0.0	0.00	0.03	19	37	0.62	0.65	91	177	2.95	791	119	1.98	0.03	64	1.07	6.03	6.68
61'	3349	60	3000	15	0.0	0.00	0.03	19	43	0.71	0.74	91	203	3.39	910	136	2.27	0.04	81	1.35	7.05	7.80
71'	3700	60	3000	15	0.0	0.00	0.03	19	47	0.79	0.82	91	225	3.74	1005	151	2.51	0.04	94	1.57	7.87	8.68

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Dozer Blade																						
Front Mount																						
Light Duty																						
7'	1298	60		15	0.0	0.00	0.03	14	13	0.21	0.24	90	78	1.30	375	56	0.94	0.02	5	0.08	2.34	2.58
8'	1851	60		15	0.0	0.00	0.03	14	18	0.30	0.33	90	112	1.86	535	80	1.34	0.02	5	0.08	3.30	3.63
9'	1943	60		15	0.0	0.00	0.03	14	19	0.31	0.34	90	117	1.95	561	84	1.40	0.02	5	0.08	3.46	3.80
10'	2658	60		15	0.0	0.00	0.03	14	26	0.43	0.46	90	160	2.67	768	115	1.92	0.03	7	0.12	4.74	5.20
12'	2976	60		15	0.0	0.00	0.03	14	29	0.48	0.51	90	179	2.99	859	129	2.15	0.04	7	0.12	5.29	5.80
Medium Duty																						
8'	2947	60		15	0.0	0.00	0.03	14	28	0.47	0.50	90	178	2.96	851	128	2.13	0.04	5	0.08	5.21	5.71
9'	3250	60		15	0.0	0.00	0.03	14	31	0.52	0.55	90	196	3.26	939	141	2.35	0.04	5	0.08	5.73	6.29
10'	4148	60		15	0.0	0.00	0.03	14	40	0.67	0.70	90	250	4.17	1198	180	2.99	0.05	7	0.12	7.33	8.03
12'	4463	60		15	0.0	0.00	0.03	14	43	0.72	0.75	90	269	4.48	1289	193	3.22	0.06	7	0.12	7.88	8.63
13'	4689	60		15	0.0	0.00	0.03	14	45	0.75	0.78	90	283	4.71	1354	203	3.39	0.06	9	0.15	8.30	9.09
14'	4923	60		15	0.0	0.00	0.03	14	48	0.79	0.82	90	297	4.94	1422	213	3.55	0.06	9	0.15	8.71	9.53
Heavy Duty																						
9'	3409	60		15	0.0	0.00	0.03	14	33	0.55	0.58	90	205	3.42	985	148	2.46	0.04	5	0.08	6.01	6.59
10'	3541	60		15	0.0	0.00	0.03	14	34	0.57	0.60	90	213	3.56	1023	153	2.56	0.04	7	0.12	6.27	6.87
12'	3781	60		15	0.0	0.00	0.03	14	37	0.61	0.64	90	228	3.80	1092	164	2.73	0.05	7	0.12	6.69	7.33

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
4 Wheel Drive																						
10'	4883	60		15	0.0	0.00	0.03	14	47	0.79	0.82	90	294	4.90	1410	212	3.53	0.06	7	0.12	8.61	9.42
12'	5455	60		15	0.0	0.00	0.03	14	53	0.88	0.91	90	329	5.48	1575	236	3.94	0.07	7	0.12	9.60	10.51
13'	5836	60		15	0.0	0.00	0.03	14	56	0.94	0.97	90	352	5.86	1685	253	4.21	0.07	9	0.15	10.30	11.27
14'	6074	60		15	0.0	0.00	0.03	14	59	0.98	1.01	90	366	6.10	1754	263	4.39	0.08	9	0.15	10.71	11.72
Rear Mount - 3 point hitch																						
To 40 HP																						
5'	290	60		15	0.0	0.00	0.03	14	3	0.05	0.08	90	17	0.29	84	13	0.21	0.00	5	0.08	0.59	0.66
6'	414	60		15	0.0	0.00	0.03	14	4	0.07	0.10	90	25	0.42	120	18	0.30	0.01	5	0.08	0.80	0.90
7'	484	60		15	0.0	0.00	0.03	14	5	0.08	0.11	90	29	0.49	140	21	0.35	0.01	5	0.08	0.92	1.03
To 60 HP																						
6'	731	60		15	0.0	0.00	0.03	14	7	0.12	0.15	90	44	0.73	211	32	0.53	0.01	5	0.08	1.35	1.50
7'	832	60		15	0.0	0.00	0.03	14	8	0.13	0.16	90	50	0.84	240	36	0.60	0.01	5	0.08	1.53	1.69
8'	886	60		15	0.0	0.00	0.03	14	9	0.14	0.17	90	53	0.89	256	38	0.64	0.01	5	0.08	1.62	1.80
Over 60 HP - manual adjust																						
7'	1456	60		15	0.0	0.00	0.03	14	14	0.23	0.26	90	88	1.46	420	63	1.05	0.02	5	0.08	2.62	2.88
9'	1529	60		15	0.0	0.00	0.03	14	15	0.25	0.28	90	92	1.54	442	66	1.10	0.02	5	0.08	2.74	3.02
- hydraulic adjust																						
7'	2328	60		15	0.0	0.00	0.03	14	22	0.37	0.40	90	140	2.34	672	101	1.68	0.03	5	0.08	4.13	4.54
8'	2589	60		15	0.0	0.00	0.03	14	25	0.42	0.45	90	156	2.60	748	112	1.87	0.03	5	0.08	4.59	5.03
10'	2593	60		15	0.0	0.00	0.03	14	25	0.42	0.45	90	156	2.60	749	112	1.87	0.03	7	0.12	4.63	5.07

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Air - Cooled Engines																						
Rewind																						
HP																						
2	220	100		10	0.5	0.64	0.10	23	5	0.05	0.79	82	18	0.18	87	13	0.13	0.00		0.00	0.31	1.10
3	257	100		10	0.5	0.64	0.10	23	6	0.06	0.79	82	21	0.21	102	15	0.15	0.00		0.00	0.37	1.16
5	317	100		10	0.6	0.77	0.12	23	7	0.07	0.96	82	26	0.26	125	19	0.19	0.00		0.00	0.45	1.41
6	435	100		10	0.6	0.77	0.12	23	10	0.10	0.98	82	36	0.36	172	26	0.26	0.00		0.00	0.62	1.60
8	410	100		10	0.7	0.90	0.13	23	9	0.09	1.12	82	34	0.34	162	24	0.24	0.00		0.00	0.59	1.71
11	560	100		10	1.2	1.54	0.23	23	13	0.13	1.89	82	46	0.46	222	33	0.33	0.01		0.00	0.80	2.69
Electric start																						
HP																						
9	648	100		10	0.8	1.02	0.15	23	15	0.15	1.33	82	53	0.53	256	38	0.38	0.01		0.00	0.92	2.25
10	859	100		10	1.1	1.41	0.21	23	20	0.20	1.82	82	71	0.71	340	51	0.51	0.01		0.00	1.23	3.04
12	775	100		10	1.3	1.66	0.25	23	18	0.18	2.09	82	64	0.64	307	46	0.46	0.01		0.00	1.11	3.20
14	960	100		10	1.6	2.05	0.31	23	22	0.22	2.58	82	79	0.79	380	57	0.57	0.01		0.00	1.37	3.95
16	989	100		10	1.8	2.30	0.35	23	23	0.23	2.88	82	81	0.81	391	59	0.59	0.01		0.00	1.41	4.29
20	1986	100		10	2.2	2.82	0.42	23	46	0.46	3.69	82	163	1.63	786	118	1.18	0.02		0.00	2.83	6.53
Standby Electric Generator - PTO driven																						
15 kwh	3150	20		15	0.0	0.00	0.03	4	9	0.45	0.48	90	190	9.49	910	136	6.82	0.12		0.00	16.43	16.91
25 kwh	3795	20		15	0.0	0.00	0.03	4	11	0.54	0.57	90	229	11.44	1096	164	8.22	0.14		0.00	19.80	20.37

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/%	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/%	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Standby Electric Generator - Engine driven																						
2250 Watt 5 HP	790	100		10	0.6	0.77	0.12	23	18	0.18	1.06	82	65	0.65	228	34	0.34	0.01		0.00	1.00	2.06
3250 Watt 8 HP	1070	100		10	0.7	0.90	0.13	23	25	0.25	1.28	82	88	0.88	309	46	0.46	0.01		0.00	1.35	2.63
3750 Watt 8 HP	1205	100		10	0.7	0.90	0.13	23	28	0.28	1.31	82	99	0.99	348	52	0.52	0.01		0.00	1.52	2.83
5000 Watt 10 HP	1385	100		10	1.1	1.41	0.21	23	32	0.32	1.94	82	114	1.14	400	60	0.60	0.01		0.00	1.75	3.69
6500 Watt 16 HP	2035	100		10	1.8	2.30	0.35	23	47	0.47	3.12	82	168	1.68	588	88	0.88	0.02		0.00	2.57	5.69
Hydraulic Loader with material bucket - lift weight at maximum height:																						
Up to 1000 lb	1700	160		15	0.0	0.00	0.03	57	65	0.41	0.44	90	102	0.64	491	74	0.46	0.01	21	0.13	1.24	1.68
1000 - 1500 lb	1878	160		15	0.0	0.00	0.03	57	72	0.45	0.48	90	113	0.71	542	81	0.51	0.01	21	0.13	1.36	1.83
1500 - 2000 lb	2711	160		15	0.0	0.00	0.03	57	103	0.65	0.68	90	163	1.02	783	117	0.73	0.01	21	0.13	1.90	2.58
2000 - 3000 lb	2914	160		15	0.0	0.00	0.03	57	111	0.69	0.72	90	176	1.10	842	126	0.79	0.01	21	0.13	2.03	2.76
3000 - 4000 lb	4618	160		15	0.0	0.00	0.03	57	176	1.10	1.13	90	278	1.74	1334	200	1.25	0.02	22	0.14	3.15	4.28
4000 - 5000 lb	5081	160		15	0.0	0.00	0.03	57	194	1.21	1.24	90	306	1.91	1467	220	1.38	0.02	22	0.14	3.45	4.69
5000 & over lb	5733	160		15	0.0	0.00	0.03	57	219	1.37	1.40	90	346	2.16	1656	248	1.55	0.03	22	0.14	3.88	5.27

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $ HR	INS $ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Grain Dryers - Propane																						
Batch PTO																						
275 bu.	11885	140		15	13.0	8.28	1.24	47	376	2.69	12.21	90	716	5.12	5432	515	3.68	0.06	40	0.29	9.14	21.35
350 bu.	13602	140		15	18.0	11.47	1.72	47	430	3.07	16.26	90	820	5.86	3928	589	4.21	0.07	40	0.29	10.42	26.68
400 bu.	14756	140		15	18.0	11.47	1.72	47	467	3.33	16.52	90	889	6.35	4262	639	4.57	0.08	42	0.30	11.30	27.82
500 bu.	17898	140		15	20.0	12.74	1.91	47	566	4.04	18.70	90	1079	7.70	5169	775	5.54	0.10	42	0.30	13.64	32.33
700 bu.	24231	140		15	25.0	15.92	2.39	47	767	5.48	23.79	90	1460	10.43	6998	1050	7.50	0.13	43	0.31	18.37	42.15
Continuous Flow - PTO 1/																						
600 bu.	17690	140		15	24.0	15.29	2.29	47	560	4.00	21.58	90	1066	7.62	5109	766	5.47	0.09	42	0.30	13.48	35.06
650 bu.	18525	140		15	25.0	15.92	2.39	47	586	4.19	22.50	90	1116	7.97	5350	803	5.73	0.10	42	0.30	14.11	36.61
750 bu.	21570	140		15	26.0	16.56	2.48	47	682	4.87	23.92	90	1300	9.29	6229	934	6.67	0.12	43	0.31	16.38	40.30
850 bu.	24420	140		15	30.0	19.11	2.87	47	773	5.52	27.49	90	1472	10.51	7052	1058	7.56	0.13	43	0.31	18.51	46.00
1500 bu.	36290	140		15	39.0	24.84	3.73	47	1148	8.20	36.77	90	2187	15.62	10481	1572	11.23	0.19	48	0.34	27.39	64.16
1600 bu.	39667	140		15	40.0	25.48	3.82	47	1255	8.96	38.27	90	2391	17.08	11456	1718	12.27	0.21	50	0.36	29.92	68.18

1/ Cleaning Capacity Wheat

600 - 300 bu/hr
650 - 370 bu/hr
750 - 410 bu/hr
850 - 470 bu/hr
1500 - 890 bu/hr
1600 - 960 bu/hr

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS */*	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION */*	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Motorcycle - Dual Purpose on/off road with headlights, tail light, turn signals, speedometer, odometer, horn, rearview mirror																						
cc 50 -60	589	100		10	0.5	0.64	0.10	23	14	0.14	0.87	82	48	0.48	233	35	0.35	0.01	5	0.05	0.89	1.76
70 -90	840	100		10	0.7	0.83	0.12	23	19	0.19	1.15	82	69	0.69	332	50	0.50	0.01	5	0.05	1.25	2.40
91 -109	1104	100		10	0.9	1.15	0.17	23	25	0.25	1.58	82	91	0.91	437	66	0.66	0.01	5	0.05	1.63	3.20
110 -125	1424	100		10	1.1	1.41	0.21	23	33	0.33	1.95	82	117	1.17	563	85	0.85	0.01	5	0.05	2.08	4.03
126 -200	1597	100		10	1.3	1.66	0.25	23	37	0.37	2.28	82	131	1.31	632	95	0.95	0.02	5	0.05	2.33	4.61
201 -250	2050	100		10	1.7	2.18	0.33	23	47	0.47	2.97	82	169	1.69	811	122	1.22	0.02	5	0.05	2.98	5.95
251 -500	2500	100		10	2.0	2.56	0.38	23	57	0.57	3.52	82	206	2.06	989	148	1.48	0.03	6	0.06	3.63	7.15
3 - Wheel Bikes - Dual Purpose on/off road with headlights, tail light, turn signals, speedometer, odometer, horn, rearview mirror																						
cc 70	949	100		10	0.7	0.83	0.12	23	22	0.22	1.17	82	78	0.78	376	56	0.56	0.01	6	0.06	1.41	2.59
110 -125	1525	100		10	1.1	1.41	0.21	23	35	0.35	1.97	82	126	1.26	603	91	0.91	0.02	8	0.08	2.26	4.23
175 -200	1983	100		10	1.3	1.66	0.25	23	46	0.46	2.37	82	163	1.63	785	118	1.18	0.02	8	0.08	2.91	5.28
250	2450	100		10	1.7	2.18	0.33	23	56	0.56	3.06	82	202	2.02	969	145	1.45	0.03	8	0.08	3.58	6.64
Snowmobiles with headlights, tail light, speedometer, odometer, rearview mirror																						
cc 250 -300	1999	100		10	2.0	2.56	0.38	23	46	0.46	3.40	82	165	1.65	791	119	1.19	0.02	11	0.11	2.96	6.37
301 -400	2874	100		10	2.2	2.82	0.42	23	66	0.66	3.90	82	237	2.37	1137	171	1.71	0.03	11	0.11	4.21	8.11
400 -550	3932	100		10	2.7	3.46	0.52	23	90	0.90	4.88	82	324	3.24	1556	233	2.33	0.04	11	0.11	5.72	10.60

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
All - Terrain Vehicle																						
with windshield, lights, hitch																						
6 wheel	4656	100		10	0.5	0.64	0.10	23	107	1.07	1.80	82	383	3.83	1842	276	2.76	0.05	20	0.20	6.84	8.65
8 wheel	6244	100		10	0.5	0.67	0.10	23	143	1.43	2.20	82	514	5.14	2471	371	3.71	0.06	20	0.20	9.11	11.31
16 wheel	7900	100		10	0.6	0.77	0.12	23	181	1.81	2.70	82	650	6.50	3126	469	4.69	0.08	20	0.20	11.47	14.17
12" track	9299	100		10	1.0	1.28	0.19	23	213	2.13	3.61	82	765	7.65	3680	552	5.52	0.10	20	0.20	13.47	17.08
18" track	10170	100		10	1.3	1.66	0.25	23	233	2.33	4.25	82	837	8.37	4024	604	6.04	0.10	20	0.20	14.71	18.96
Electric Motors																						
Open - auto overload, capacitor start																						
HP																						
0.25	102	140		15	0.0	0.00		47	3	0.02	0.02	90	6	0.04	29	4	0.03	0.00		0.00	0.08	0.10
0.33	129	140		15	0.0	0.00		47	4	0.03	0.03	90	8	0.06	37	6	0.04	0.00		0.00	0.10	0.13
0.50	161	140		15	0.0	0.00		47	5	0.04	0.04	90	10	0.07	46	7	0.05	0.00		0.00	0.12	0.16
0.75	204	140		15	0.0	0.00		47	6	0.05	0.05	90	12	0.09	59	9	0.06	0.00		0.00	0.15	0.20
1	209	140		15	0.0	0.00		47	7	0.05	0.05	90	13	0.09	60	9	0.06	0.00		0.00	0.16	0.20
1.5	265	140		15	0.0	0.00		47	8	0.06	0.06	90	16	0.11	77	11	0.08	0.00		0.00	0.20	0.26
2	341	140		15	0.0	0.00		47	11	0.08	0.08	90	21	0.15	98	15	0.11	0.00		0.00	0.25	0.33
3	465	140		15	0.0	0.00		47	15	0.11	0.11	90	28	0.20	134	20	0.14	0.00		0.00	0.35	0.45
5	676	140		15	0.0	0.00		47	21	0.15	0.15	90	41	0.29	193	29	0.21	0.00		0.00	0.50	0.66

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Electric Motors																						
Enclosed - single phase, capacitor start, auto overload																						
0.33	117	140		15	0.0	0.00		47	4	0.03	0.03	90	7	0.05	34	5	0.04	0.00		0.00	0.09	0.11
0.50	134	140		15	0.0	0.00		47	4	0.03	0.03	90	8	0.06	39	6	0.04	0.00		0.00	0.10	0.13
0.75	168	140		15	0.0	0.00		47	5	0.04	0.04	90	10	0.07	49	7	0.05	0.00		0.00	0.13	0.16
1	180	140		15	0.0	0.00		47	6	0.04	0.04	90	11	0.08	52	8	0.06	0.00		0.00	0.13	0.17
1.5	244	140		15	0.0	0.00		47	8	0.06	0.06	90	15	0.11	70	11	0.08	0.00		0.00	0.18	0.24
2	345	140		15	0.0	0.00		47	11	0.08	0.08	90	21	0.15	100	15	0.11	0.00		0.00	0.26	0.34
3	461	140		15	0.0	0.00		47	15	0.10	0.10	90	28	0.20	133	20	0.14	0.00		0.00	0.34	0.45
5	626	140		15	0.0	0.00		47	20	0.14	0.14	90	38	0.27	181	27	0.19	0.00		0.00	0.47	0.61
7.5	779	140		15	0.0	0.00		47	25	0.18	0.18	90	47	0.34	225	34	0.24	0.00		0.00	0.58	0.76
10	942	140		15	0.0	0.00		47	30	0.21	0.21	90	57	0.41	272	41	0.29	0.01		0.00	0.70	0.91
Packers																						
4'	402	60	301	15	0.0	0.00	0.03	1	0	0.00	0.03	90	24	0.40	116	17	0.29	0.01	3	0.05	0.75	0.78
5'	481	60	343	15	0.0	0.00	0.03	1	0	0.00	0.03	90	29	0.48	139	21	0.35	0.01	5	0.08	0.92	0.95
6'	618	60	487	15	0.0	0.00	0.03	1	0	0.01	0.04	90	37	0.62	178	27	0.45	0.01	7	0.12	1.19	1.23
7'	656	60	574	15	0.0	0.00	0.03	1	0	0.01	0.04	90	40	0.66	189	28	0.47	0.01	9	0.15	1.29	1.33
8'	1098	60	661	15	0.0	0.00	0.03	1	1	0.01	0.04	90	66	1.10	317	48	0.79	0.01	10	0.17	2.08	2.12
9'	1431	60	1090	15	0.0	0.00	0.03	1	1	0.01	0.04	90	86	1.44	413	62	1.03	0.02	13	0.22	2.71	2.75

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Packer Drawbars - includes harrows and packers																						
30 '	8763	60	2058	15	0.0	0.00	0.05	32	185	3.09	3.14	90	528	8.80	2531	380	6.33	0.11	36	0.60	15.84	18.98
32 '	8877	60	2346	15	0.0	0.00	0.05	32	188	3.13	3.18	90	535	8.92	2564	385	6.41	0.11	36	0.60	16.04	19.22
34 '	9105	60	2668	15	0.0	0.00	0.05	32	193	3.21	3.26	90	549	9.15	2630	394	6.57	0.11	36	0.60	16.43	19.70
36 '	9244	60	2922	15	0.0	0.00	0.05	32	196	3.26	3.31	90	557	9.29	2670	400	6.67	0.12	36	0.60	16.67	19.99
38 '	9488	60	3113	15	0.0	0.00	0.05	32	201	3.35	3.40	90	572	9.53	2740	411	6.85	0.12	36	0.60	17.10	20.50
40 '	9608	60	3305	15	0.0	0.00	0.05	32	203	3.39	3.44	90	579	9.65	2775	416	6.94	0.12	43	0.72	17.42	20.86
42 '	9861	60	3956	15	0.0	0.00	0.05	32	209	3.48	3.53	90	594	9.90	2848	427	7.12	0.12	43	0.72	17.86	21.39
44 '	10069	60	4607	15	0.0	0.00	0.05	32	213	3.55	3.60	90	607	10.11	2908	436	7.27	0.13	43	0.72	18.23	21.83
46 '	10358	60	5258	15	0.0	0.00	0.05	32	219	3.65	3.70	90	624	10.40	2991	449	7.48	0.13	43	0.72	18.73	22.43
48 '	10672	60	5909	15	0.0	0.00	0.05	32	226	3.76	3.81	90	643	10.72	3082	462	7.71	0.13	43	0.72	19.27	23.09
50 '	12591	60	6560	15	0.0	0.00	0.05	32	267	4.44	4.49	90	759	12.65	3636	545	9.09	0.16	48	0.80	22.70	27.19
54 '	12662	60	7211	15	0.0	0.00	0.05	32	268	4.47	4.52	90	763	12.72	3657	549	9.14	0.16	48	0.80	22.82	27.34
58 '	13075	60	7862	15	0.0	0.00	0.05	32	277	4.61	4.66	90	788	13.13	3776	566	9.44	0.16	48	0.80	23.54	28.20
60 '	13350	60	8513	15	0.0	0.00	0.05	32	283	4.71	4.76	90	805	13.41	3855	578	9.64	0.17	53	0.88	24.10	28.86
62 '	13494	60	9164	15	0.0	0.00	0.05	32	286	4.76	4.81	90	813	13.55	3897	585	9.74	0.17	53	0.88	24.35	29.16
66 '	13907	60	9815	15	0.0	0.00	0.05	32	294	4.91	4.96	90	838	13.97	4016	602	10.04	0.17	54	0.90	25.08	30.04
70 '	14498	6010	466	15	0.0	0.00	0.05	32	307	5.11	5.16	90	874	14.56	4187	628	10.47	0.18	59	0.98	26.19	31.36
76 '	15605	6011	117	15	0.0	0.00	0.05	32	330	5.51	5.56	90	940	15.67	4507	676	11.27	0.20	66	1.10	28.24	33.79

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS °/°	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION °/°	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Post Augers																						
3 PT Hitch																						
6"	691	60		15	0.0	0.00	0.03	26	12	0.20	0.23	90	42	0.69	200	30	0.50	0.01	2	0.03	1.23	1.47
9"	721	60		15	0.0	0.00	0.03	26	13	0.21	0.24	90	43	0.72	208	31	0.52	0.01	2	0.03	1.29	1.53
12"	810	60		15	0.0	0.00	0.03	26	14	0.24	0.27	90	49	0.81	234	35	0.58	0.01	2	0.03	1.44	1.71
18"	1033	60		15	0.0	0.00	0.03	26	18	0.30	0.33	90	62	1.04	298	45	0.75	0.01	3	0.05	1.85	2.18
Hydraulic																						
9"	1692	60		15	0.0	0.00	0.03	26	30	0.49	0.52	90	102	1.70	489	73	1.22	0.02	2	0.03	2.98	3.50
9" HD	2536	60		15	0.0	0.00	0.03	26	44	0.74	0.77	90	153	2.55	732	110	1.83	0.03	2	0.03	4.44	5.21
Post Driver																						
Tractor Mount	1855	60		15	0.0	0.00	0.03	26	32	0.54	0.57	90	112	1.86	536	80	1.34	0.02	2	0.03	3.26	3.83
Trailer Mount	2584	60		15	0.0	0.00	0.03	26	45	0.75	0.78	90	156	2.60	746	112	1.87	0.03	2	0.03	4.53	5.31
Tractor with Hydraulic level	1972	60		15	0.0	0.00	0.03	26	34	0.57	0.60	90	119	1.98	570	85	1.42	0.02	2	0.03	3.46	4.07
Rock Picker																						
Utility																						
4'	5698	100		15	0.0	0.00	0.03	40	154	1.54	1.57	90	343	3.43	1646	247	2.47	0.04	48	0.48	6.43	7.99
5'	6750	100		15	0.0	0.00	0.03	40	182	1.82	1.85	90	407	4.07	1949	292	2.92	0.05	48	0.48	7.52	9.37
7'	10474	100		15	0.0	0.00	0.03	40	283	2.83	2.86	90	631	6.31	3025	454	4.54	0.08	48	0.48	11.41	14.27

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PTO																						
5'	9210	100		15	0.0	0.00	0.03	40	249	2.49	2.52	90	555	5.55	2660	399	3.99	0.07	48	0.48	10.09	12.61
7'	11630	100		15	0.0	0.00	0.03	40	314	3.14	3.17	90	701	7.01	3359	504	5.04	0.09	48	0.48	12.61	15.78
Rock Windrower																						
12'	5000	100		15	0.0	0.00	0.03	40	135	1.35	1.38	90	301	3.01	1444	217	2.17	0.04	29	0.29	5.51	6.89
14'	6783	100		15	0.0	0.00	0.03	40	183	1.83	1.86	90	409	4.09	1959	294	2.94	0.05	33	0.33	7.41	9.27
20'	7600	100		15	0.0	0.00	0.03	40	205	2.05	2.08	90	458	4.58	2195	329	3.29	0.06	30	0.30	8.23	10.31
Rotary Cutter																						
3 PT Hitch																						
5'	1189	60	90	15	0.0	0.00	0.03	26	21	0.35	0.38	90	72	1.19	343	52	0.86	0.01	30	0.50	2.57	2.94
6'	1766	60	100	15	0.0	0.00	0.03	26	31	0.51	0.54	90	106	1.77	510	77	1.28	0.02	35	0.58	3.65	4.20
7'	2100	60	120	15	0.0	0.00	0.03	26	37	0.61	0.64	90	127	2.11	606	91	1.52	0.03	40	0.67	4.32	4.96
Trailed																						
5'	1385	60	90	15	0.0	0.00	0.03	26	24	0.40	0.43	90	83	1.39	400	60	1.00	0.02	30	0.50	2.91	3.34
6'	2124	60	100	15	0.0	0.00	0.03	26	37	0.62	0.65	90	128	2.13	613	92	1.53	0.03	35	0.58	4.28	4.93
7'	2727	60	120	15	0.0	0.00	0.03	26	48	0.79	0.82	90	164	2.74	788	118	1.97	0.03	40	0.67	5.41	6.23

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Snowblowers																						
Rear Mount																						
5 '	1331	80		15	0.0	0.00	0.03	30	26	0.33	0.36	90	80	1.00	384	58	0.72	0.01	8	0.10	1.84	2.19
6 '	1707	80		15	0.0	0.00	0.03	30	34	0.42	0.45	90	103	1.29	493	74	0.92	0.02	11	0.14	2.36	2.82
7 '	2311	80		15	0.0	0.00	0.03	30	46	0.57	0.60	90	139	1.74	667	100	1.25	0.02	14	0.17	3.19	3.79
8 '	2996	80		15	0.0	0.00	0.03	30	59	0.74	0.77	90	181	2.26	865	130	1.62	0.03	19	0.24	4.14	4.91
9 '	5826	80		15	0.0	0.00	0.03	30	115	1.44	1.47	90	351	4.39	1683	252	3.15	0.05	24	0.30	7.90	9.37
Front Mount																						
6 '	3586	80		15	0.0	0.00	0.03	30	71	0.89	0.92	90	216	2.70	1036	155	1.94	0.03	11	0.14	4.81	5.73
7 '	6117	80		15	0.0	0.00	0.03	30	121	1.51	1.54	90	369	4.61	1767	265	3.31	0.06	14	0.17	8.15	9.69
8 '	6341	80		15	0.0	0.00	0.03	30	125	1.57	1.60	90	382	4.78	1831	275	3.43	0.06	19	0.24	8.51	10.10
9 '	7000	80		15	0.0	0.00	0.03	30	138	1.73	1.76	90	422	5.27	2022	303	3.79	0.07	24	0.30	9.43	11.19
Sprayers																						
Trailed with polythene tank																						
200 gal.																						
43 '	1216	60	760	15	0.0	0.00	0.03	26	21	0.35	0.38	90	73	1.22	351	53	0.88	0.02	43	0.72	2.83	3.22
56 '	2168	60	1003	15	0.0	0.00	0.03	26	38	0.63	0.66	90	131	2.18	626	94	1.57	0.03	46	0.77	4.54	5.20
250 gal.																						
43 '	3865	60	760	15	0.0	0.00	0.03	26	68	1.13	1.16	90	233	3.88	1116	167	2.79	0.05	43	0.72	7.44	8.59
60 '	4211	60	1090	15	0.0	0.00	0.03	26	74	1.23	1.26	90	254	4.23	1216	182	3.04	0.05	46	0.77	8.09	9.35

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
300 gal.																						
60 '	5134	60	1090	15	0.0	0.00	0.03	26	90	1.49	1.52	90	309	5.16	1483	222	3.71	0.06	48	0.80	9.73	11.25
400 gal.																						
50 '	3655	60	900	15	0.0	0.00	0.03	26	64	1.06	1.09	90	220	3.67	1056	158	2.64	0.05	44	0.73	7.09	8.18
60 '	4550	60	1090	15	0.0	0.00	0.03	26	79	1.32	1.35	90	274	4.57	1314	197	3.29	0.06	46	0.77	8.68	10.03
68 '	5041	60	1224	15	0.0	0.00	0.03	26	88	1.47	1.50	90	304	5.06	1456	218	3.64	0.06	51	0.85	9.62	11.11
82 '	5808	60	1308	15	0.0	0.00	0.03	26	101	1.69	1.72	90	350	5.83	1677	252	4.19	0.07	59	0.99	11.08	12.80
500 gal.																						
63 '	5181	60	1110	15	0.0	0.00	0.03	26	90	1.51	1.54	90	312	5.20	1496	224	3.74	0.06	46	0.77	9.78	11.31
68 '	5602	60	1224	15	0.0	0.00	0.03	26	98	1.63	1.66	90	338	5.63	1618	243	4.04	0.07	51	0.85	10.59	12.25
82 '	6181	60	1308	15	0.0	0.00	0.03	26	108	1.80	1.83	90	373	6.21	1785	268	4.46	0.08	59	0.98	11.73	13.56
880 gal.																						
63 '	7796	60	1110	15	0.0	0.00	0.03	26	136	2.27	2.30	90	470	7.83	2251	338	5.63	0.10	46	0.77	14.32	16.62
82 '	8080	60	1308	15	0.0	0.00	0.03	26	141	2.35	2.38	90	487	8.12	2334	350	5.83	0.10	59	0.98	15.03	17.42
Tractor Side Mount Sprayer																						
2 x 125 250 gal.	2224	60		15	0.0	0.00	0.03	26	39	0.65	0.68	90	134	2.23	642	96	1.61	0.03	44	0.73	4.60	5.28
2 x 200 400 gal.	2486	60		15	0.0	0.00	0.03	26	43	0.72	0.75	90	150	2.50	718	108	1.79	0.03	46	0.77	5.09	5.84

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS o/o	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION o/o	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Tractor Front Mount Sprayer																						
200 gal.	1874	60		15	0.0	0.00	0.03	26	33	0.55	0.58	90	113	1.88	541	81	1.35	0.02	43	0.72	3.98	4.55
400 gal.	2978	60		15	0.0	0.00	0.03	26	52	0.87	0.90	90	179	2.99	860	129	2.15	0.04	46	0.77	5.95	6.84
500 gal.	3025	60		15	0.0	0.00	0.03	26	53	0.88	0.91	90	182	3.04	874	131	2.18	0.04	49	0.82	6.08	6.99
3 PT Hitch Mounted Sprayer																						
125 gal.																						
21 '	1595	60		15	0.0	0.00	0.03	26	28	0.46	0.49	90	96	1.60	461	69	1.15	0.02	21	0.35	3.12	3.62
28 '	1852	60		15	0.0	0.00	0.03	26	32	0.54	0.57	90	112	1.86	535	80	1.34	0.02	25	0.42	3.64	4.21
200 gal.																						
21 '	1777	60		15	0.0	0.00	0.03	26	31	0.52	0.55	90	107	1.78	513	77	1.28	0.02	21	0.35	3.44	3.99
28 '	2035	60		15	0.0	0.00	0.03	26	36	0.59	0.62	90	123	2.04	588	88	1.47	0.03	25	0.42	3.96	4.58
300 gal.																						
28 '	2269	60		15	0.0	0.00	0.03	26	40	0.66	0.69	90	137	2.28	655	98	1.64	0.03	25	0.42	4.36	5.05
35 '	2649	60		15	0.0	0.00	0.03	26	46	0.77	0.80	90	160	2.66	765	115	1.91	0.03	29	0.48	5.09	5.89
42 '	2911	60		15	0.0	0.00	0.03	26	51	0.85	0.88	90	175	2.92	841	126	2.10	0.04	34	0.57	5.63	6.51

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL/HR	FUEL $/HR	LUBE $/HR	REPAIRS o/o	REPAIRS $/YR	REPAIRS $/HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION o/o	DEPRECIATION $/YR	DEPRECIATION $/HR	INTEREST AVE VALUE	INTEREST $/YR	INTEREST $/HR	INS $/HR	HOUSING $/YR	HOUSING $/HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Truck Mounted Sprayer																						
200 gal.																						
28'	2468	60		15	0.0	0.00	0.03	26	43	0.72	0.75	90	149	2.48	713	107	1.78	0.03	25	0.42	4.71	5.46
300 gal.																						
28'	2578	60		15	0.0	0.00	0.03	26	45	0.75	0.78	90	155	2.59	745	112	1.86	0.03	25	0.42	4.90	5.68
42'	3372	60		15	0.0	0.00	0.03	26	59	0.98	1.01	90	203	3.39	974	146	2.43	0.04	34	0.57	6.43	7.44
47'	4000	60		15	0.0	0.00	0.03	26	70	1.16	1.19	90	241	4.02	1155	173	2.89	0.05	43	0.72	7.67	8.87
400 gal.																						
35'	3449	60		15	0.0	0.00	0.03	26	60	1.00	1.03	90	208	3.46	996	149	2.49	0.04	27	0.45	6.45	7.48
42'	3853	60		15	0.0	0.00	0.03	26	67	1.12	1.15	90	233	3.88	1116	167	2.79	0.05	34	0.57	7.28	8.44
47'	4155	60		15	0.0	0.00	0.03	26	73	1.21	1.24	90	250	4.17	1200	180	3.00	0.05	43	0.72	7.94	9.18
500 gal.																						
42'	3909	60		15	0.0	0.00	0.03	26	68	1.14	1.17	90	236	3.93	1129	169	2.82	0.05	34	0.57	7.36	8.53
47'	4202	60		15	0.0	0.00	0.03	26	73	1.22	1.25	90	253	4.22	1214	182	3.03	0.05	47	0.78	8.09	9.34
Sprayer - Self - Propelled																						
54'	17351	60	950	15	1.8	2.30	0.35	26	303	5.05	7.70	90	1046	17.43	5011	752	12.53	0.22	62	1.03	31.21	38.91

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS o/o	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION o/o	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Delevan Kit																						
4 nozzle	165	60		15	0.0	0.00		26	3	0.05	0.05	90	10	0.17	48	7	0.12	0.00		0.00	0.29	0.33
6 nozzle	220	60		15	0.0	0.00		26	4	0.06	0.06	90	13	0.22	64	10	0.16	0.00		0.00	0.38	0.45
Granular Herbicide Attachment																						
10 -20'	1620	60		15	0.0	0.00		81	87	1.45	1.45	90	98	1.63	468	70	1.17	0.02		0.00	2.82	4.27
20 -30'	2700	60		15	0.0	0.00		81	145	2.42	2.42	90	163	2.71	780	117	1.95	0.03		0.00	4.70	7.11
30 -40'	3780	60		15	0.0	0.00		81	203	3.38	3.38	90	228	3.80	1092	164	2.73	0.05		0.00	6.57	9.96
40 -50'	4860	60		15	0.0	0.00		81	261	4.35	4.35	90	293	4.88	1404	211	3.51	0.06		0.00	8.45	12.80
50 -60'	5940	60		15	0.0	0.00		81	319	5.32	5.32	90	358	5.97	1715	257	4.29	0.07		0.00	10.33	15.65
Fertilizer Spreader																						
1 Ton	2866	60	820	15	0.0	0.00	0.04	81	154	2.57	2.61	90	173	2.88	828	124	2.07	0.04	8	0.13	5.12	7.72
2 Ton	3150	60	820	15	0.0	0.00	0.04	81	169	2.82	2.86	90	190	3.16	910	136	2.27	0.04	15	0.25	5.73	8.59
4 Ton	4982	60	820	15	0.0	0.00	0.04	81	268	4.46	4.50	90	300	5.00	1439	216	3.60	0.06	22	0.37	9.03	13.53
5 Ton	8422	60	820	15	0.0	0.00	0.04	81	452	7.54	7.58	90	508	8.46	2432	365	6.08	0.11	35	0.58	15.23	22.81
6 Ton	11074	60	820	15	0.0	0.00	0.04	81	595	9.91	9.95	90	667	11.12	3198	480	8.00	0.14	42	0.70	19.96	29.91

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS o/o	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION o/o	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Fertilizer Spreader																						
Barbered Meter Feed																						
14'	2654	60	820	15	0.0	0.00	0.04	81	143	2.38	2.42	90	160	2.67	766	115	1.92	0.03	8	0.13	4.75	7.16
28'	8170	60	820	15	0.0	0.00	0.04	81	439	7.31	7.35	90	492	8.21	2359	354	5.90	0.10	15	0.25	14.46	21.81
36'	10987	60	820	15	0.0	0.00	0.04	81	590	9.83	9.87	90	662	11.04	3173	476	7.93	0.14	22	0.37	19.47	29.35
45'	11988	60	820	15	0.0	0.00	0.04	81	644	10.73	10.77	90	722	12.04	3462	519	8.66	0.15	34	0.57	21.41	32.18
Manure Spreader																						
Beater Type 1/																						
100 - 150 bu.	3936	140		15	0.0	0.00	0.04	47	125	0.89	0.93	90	237	1.69	1137	171	1.22	0.02	43	0.31	3.24	4.17
160 - 200 bu.	4936	140		15	0.0	0.00	0.04	47	156	1.12	1.16	90	297	2.12	1426	214	1.53	0.03	66	0.47	4.15	5.31
210 - 250 bu.	5669	140		15	0.0	0.00	0.04	47	179	1.28	1.32	90	342	2.44	1637	246	1.75	0.03	88	0.63	4.85	6.17
260 - 295 bu.	7851	140		15	0.0	0.00	0.04	47	248	1.77	1.81	90	473	3.38	2267	340	2.43	0.04	99	0.71	6.56	8.37
300 - 390 bu.	9214	140		15	0.0	0.00	0.04	47	291	2.08	2.12	90	555	3.97	2661	399	2.85	0.05	109	0.78	7.65	9.77
400 - 490 bu.	10730	140		15	0.0	0.00	0.04	47	339	2.42	2.46	90	647	4.62	3099	465	3.32	0.06	119	0.85	8.85	11.31
500 bu.	15433	140		15	0.0	0.00	0.04	47	488	3.49	3.53	90	930	6.64	4457	669	4.78	0.08	133	0.95	12.45	15.98
Hydraulic Push																						
175 bu.	7095	140		15	0.0	0.00	0.04	47	224	1.60	1.64	90	428	3.05	2049	307	2.20	0.04	54	0.39	5.67	7.32

1/ over 250 bu. with tandem wheels

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Liquid Manure Spreader																						
Flail Type																						
845 gal.	7350	140		15	0.0	0.00	0.04	47	233	1.66	1.70	90	443	3.16	2123	318	2.27	0.04		0.00	5.48	7.18
1064 gal.	9600	140		15	0.0	0.00	0.04	47	304	2.17	2.21	90	579	4.13	2772	416	2.97	0.05		0.00	7.15	9.36
2250 gal.	10814	140		15	0.0	0.00	0.04	47	342	2.44	2.48	90	652	4.66	3123	468	3.35	0.06		0.00	8.06	10.54
3000 gal.	12966	140		15	0.0	0.00	0.04	47	410	2.93	2.97	90	781	5.58	3745	562	4.01	0.07		0.00	9.66	12.63
Vacuum with knife injection																						
1070 gal.	6333	140		15	0.0	0.00	0.04	47	200	1.43	1.47	90	382	2.73	1829	274	1.96	0.03		0.00	4.72	6.19
1500 gal.	8700	140		15	0.0	0.00	0.04	47	275	1.97	2.01	90	524	3.75	2513	377	2.69	0.05		0.00	6.48	8.49
2250 gal.	13404	140		15	0.0	0.00	0.04	47	424	3.03	3.07	90	808	5.77	3871	581	4.15	0.07		0.00	9.99	13.06
3000 gal.	16966	140		15	0.0	0.00	0.04	47	537	3.83	3.87	90	1022	7.30	4900	735	5.25	0.09		0.00	12.64	16.52
Subsoiler																						
integral, 3 point hitch, with gauge wheels																						
5 shank	2599	60		15	0.0	0.00		14	25	0.42	0.42	90	157	2.61	751	113	1.88	0.03		0.00	4.52	4.94
7 shank	3178	60		15	0.0	0.00		14	31	0.51	0.51	90	192	3.19	918	138	2.29	0.04		0.00	5.53	6.04
9 shank	3945	60		15	0.0	0.00		14	38	0.64	0.64	90	238	3.96	1139	171	2.85	0.05		0.00	6.86	7.50
11 shank	4519	60		15	0.0	0.00		14	44	0.73	0.73	90	272	4.54	1305	196	3.26	0.06		0.00	7.86	8.59

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL/HR	FUEL $/HR	LUBE $/HR	REPAIRS %	REPAIRS $/YR	REPAIRS $/HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/YR	DEPRECIATION $/HR	INTEREST AVE VALUE	INTEREST $/YR	INTEREST $/HR	INS $/HR	HOUSING $/YR	HOUSING $/HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
High Dump Silage Wagon																						
630 ft^3	7235	160		20	0.0	0.00	0.03	86	310	1.93	1.96	95	343	2.14	2089	313	1.96	0.03	42	0.26	4.40	6.36
730 ft^3	7770	160		20	0.0	0.00	0.03	86	332	2.08	2.11	95	368	2.30	2244	337	2.10	0.04	44	0.28	4.72	6.82
930 ft^3	10950	160		20	0.0	0.00	0.03	86	469	2.93	2.96	95	519	3.24	3162	474	2.96	0.05	46	0.29	6.55	9.51
Wagons with tires																						
3 Ton	688	160		20	0.0	0.00	0.03	54	18	0.12	0.15	94	32	0.20	171	26	0.16	0.00	42	0.26	0.63	0.77
4 Ton	850	160		20	0.0	0.00	0.03	54	23	0.14	0.17	94	40	0.25	211	32	0.20	0.00	42	0.26	0.71	0.89
5 Ton	1128	160		20	0.0	0.00	0.03	54	30	0.19	0.22	94	53	0.33	280	42	0.26	0.00	42	0.26	0.86	1.08
6 Ton	1377	160		20	0.0	0.00	0.03	54	37	0.23	0.26	94	65	0.41	342	51	0.32	0.01	44	0.28	1.01	1.27
7 Ton	1689	160		20	0.0	0.00	0.03	54	45	0.28	0.31	94	80	0.50	420	63	0.39	0.01	44	0.28	1.17	1.49
8 Ton	2051	160		20	0.0	0.00	0.03	54	55	0.34	0.37	94	97	0.61	510	76	0.48	0.01	44	0.28	1.37	1.74
9 Ton	2421	160		20	0.0	0.00	0.03	54	65	0.41	0.44	94	114	0.71	602	90	0.56	0.01	46	0.29	1.58	2.01
10 Ton	2700	160		20	0.0	0.00	0.03	54	73	0.45	0.48	94	127	0.80	671	101	0.63	0.01	46	0.29	1.72	2.21
12 Ton	3116	160		20	0.0	0.00	0.03	54	84	0.52	0.55	94	147	0.92	774	116	0.73	0.01	46	0.29	1.95	2.50

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
TRUCK AND TRUCK EQUIPMENT																						
Gasoline Trucks [1/]																						
1/2 T 6 cyl.	10054	180		15	2.6	3.33	0.50	104	697	3.87	7.70	90	606	3.37	2904	436	2.42	0.04	46	0.26	6.08	13.78
8 cyl.	10547	180		15	2.8	3.58	0.54	104	731	4.06	8.18	90	636	3.53	3046	457	2.54	0.04	46	0.26	6.37	14.55
3/4 T 6 cyl.	11214	180		15	3.3	4.22	0.63	104	777	4.32	9.18	90	676	3.75	3239	486	2.70	0.05	46	0.26	6.76	15.93
8 cyl.	11708	180		15	3.6	4.61	0.69	104	812	4.51	9.81	90	706	3.92	3381	507	2.82	0.05	46	0.26	7.04	16.85
1 Ton	12850	180		15	3.8	4.86	0.73	104	891	4.95	10.54	90	774	4.30	3711	557	3.09	0.05	66	0.37	7.82	18.36
3 Ton	20502	180		15	5.5	7.04	1.06	104	1421	7.90	15.99	90	1236	6.86	5921	888	4.93	0.09	84	0.47	12.35	28.34
Tandem	34804	180		15	6.7	8.58	1.29	104	2413	13.40	23.27	90	2098	11.65	10051	1508	8.38	0.15	88	0.49	20.66	43.93
Diesel Truck [1/]																						
Tandem	47167	180		15	8.7	10.87	1.63	104	3270	18.17	30.67	90	2843	15.79	13622	2043	11.35	0.20	88	0.49	27.83	58.50

1/ Equipped with heavy duty shocks, heavy duty battery(s), block heater, high output heater, radio, mirrors, power steering, power brakes, antifreeze, spare wheel and tire.

1/2 Ton 4800 - 6100 GVW; 2200 - 2800 kg. with 4 speed transmission

3/4 Ton 6400 - 8600 GVW; 2900 - 3900 kg. as above

1 Ton 10,000 GVW; 4500 kg. as above plus dual rear tires

3 Ton 24,000 GVW; 12,700 kg. as above plus: 5 speed transmission, 2 speed rear axle

Tandem 43,000 - 50,000 GVW; 19,500 - 22,700 kg. 5 x 4 transmission, shutters,duel fuel tanks, diesel with cold start, air brakes

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS °/°	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION °/°	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Truck Hoists																						
Hydraulic																						
9 Ton	1150	40		15	0.0	0.00	0.04	30	23	0.58	0.62	90	69	1.73	332	50	1.25	0.02		0.00	3.00	3.62
10 Ton	1634	40		15	0.0	0.00	0.04	30	33	0.83	0.87	90	98	2.46	472	71	1.77	0.03		0.00	4.26	5.13
15 Ton	2042	40		15	0.0	0.00	0.04	30	41	1.03	1.07	90	123	3.08	590	88	2.21	0.04		0.00	5.33	6.40
18 -20 Ton	2212	40		15	0.0	0.00	0.04	30	45	1.12	1.16	90	133	3.33	639	96	2.40	0.04		0.00	5.77	6.93
21 -25 Ton	2714	40		15	0.0	0.00	0.04	30	55	1.37	1.41	90	164	4.09	784	118	2.94	0.05		0.00	7.08	8.49
25 -30 Ton	3170	40		15	0.0	0.00	0.04	30	64	1.60	1.64	90	191	4.78	915	137	3.43	0.06		0.00	8.27	9.91
Grain Boxes																						
Wooden - with lights, flaps, paint, installation, ladder, stock racks,																						
7' Wide 9 x10x40	1110	130		15	0.0	0.00		77	57	0.44	0.44	90	67	0.51	321	48	0.37	0.01		0.00	0.89	1.33
8' " 11 x12x45	1531	130		15	0.0	0.00		77	79	0.61	0.61	90	92	0.71	442	66	0.51	0.01		0.00	1.23	1.84
13 x14x45	1610	130		15	0.0	0.00		77	83	0.64	0.64	90	97	0.75	465	70	0.54	0.01		0.00	1.29	1.93
15 x16x50	1818	130		15	0.0	0.00		77	94	0.72	0.72	90	110	0.84	525	79	0.61	0.01		0.00	1.46	2.18
17 x18x55	2069	130		15	0.0	0.00		77	107	0.82	0.82	90	125	0.96	598	90	0.69	0.01		0.00	1.66	2.48
17 x18x60	2145	130		15	0.0	0.00		77	111	0.85	0.85	90	129	0.99	619	93	0.71	0.01		0.00	1.72	2.57
19 x20x55	2332	130		15	0.0	0.00		77	120	0.92	0.92	90	141	1.08	673	101	0.78	0.01		0.00	1.87	2.80
19 x20x60	2420	130		15	0.0	0.00		77	125	0.96	0.96	90	146	1.12	699	105	0.81	0.01		0.00	1.94	2.90
21 x22x55	2514	130		15	0.0	0.00		77	130	1.00	1.00	90	152	1.17	726	109	0.84	0.01		0.00	2.02	3.01
21 x22x60	2614	130		15	0.0	0.00		77	135	1.04	1.04	90	158	1.21	755	113	0.87	0.02		0.00	2.10	3.13

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/%	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/%	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
8½' Wide																						
12 x 45	1682	130		15	0.0	0.00		77	87	0.67	0.67	90	101	0.78	486	73	0.56	0.01		0.00	1.35	2.02
14 x 45	1710	130		15	0.0	0.00		77	88	0.68	0.68	90	103	0.79	494	74	0.57	0.01		0.00	1.37	2.05
16 x 50	1879	130		15	0.0	0.00		77	97	0.75	0.75	90	113	0.87	543	81	0.63	0.01		0.00	1.51	2.25
18 x 55	2064	130		15	0.0	0.00		77	106	0.82	0.82	90	124	0.96	596	89	0.69	0.01		0.00	1.66	2.48
18 x 60	2136	130		15	0.0	0.00		77	110	0.85	0.85	90	129	0.99	617	93	0.71	0.01		0.00	1.71	2.56
20 x 55	2373	130		15	0.0	0.00		77	122	0.94	0.94	90	143	1.10	685	103	0.79	0.01		0.00	1.90	2.85
20 x 60	2458	130		15	0.0	0.00		77	127	0.97	0.97	90	148	1.14	710	106	0.82	0.01		0.00	1.97	2.95
Steel - with lights, flaps, installation, paint, ladder, stock racks																						
8' Wide																						
9 x 40	1467	130		15	0.0	0.00		77	76	0.58	0.58	90	88	0.68	424	64	0.49	0.01		0.00	1.18	1.76
12 x 40	1736	130		15	0.0	0.00		77	90	0.69	0.69	90	105	0.80	501	75	0.58	0.01		0.00	1.39	2.08
16 x 48	2706	130		15	0.0	0.00		77	140	1.07	1.07	90	163	1.25	781	117	0.90	0.02		0.00	2.17	3.25
18 x 48	3015	130		15	0.0	0.00		77	155	1.20	1.20	90	182	1.40	871	131	1.00	0.02		0.00	2.42	3.62
20 x 48	3265	130		15	0.0	0.00		77	168	1.29	1.29	90	197	1.51	943	141	1.09	0.02		0.00	2.62	3.92
20 x 60	3603	130		15	0.0	0.00		77	186	1.43	1.43	90	217	1.67	1041	156	1.20	0.02		0.00	2.89	4.32
22 x 48	3690	130		15	0.0	0.00		77	190	1.46	1.46	90	222	1.71	1066	160	1.23	0.02		0.00	2.96	4.43
22 x 60	4063	130		15	0.0	0.00		77	209	1.61	1.61	90	245	1.88	1173	176	1.35	0.02		0.00	3.26	4.87
24 x 48	4166	130		15	0.0	0.00		77	215	1.65	1.65	90	251	1.93	1203	180	1.39	0.02		0.00	3.34	5.00
24 x 60	4573	130		15	0.0	0.00		77	236	1.81	1.81	90	276	2.12	1321	198	1.52	0.03		0.00	3.67	5.48

TABLE 6

IMPLEMENT	AVE LIST PRICE	ANNUAL USE HRS	ANNUAL USE ACRES	EST LIFE YRS	VARIABLE COSTS: FUEL GAL /HR	FUEL $/ HR	LUBE $/ HR	REPAIRS %/%	REPAIRS $/ YR	REPAIRS $/ HR	TOTAL PER HOUR	FIXED COSTS: DEPRECIATION %/%	DEPRECIATION $/ YR	DEPRECIATION $/ HR	INTEREST AVE VALUE	INTEREST $/ YR	INTEREST $/ HR	INS $/ HR	HOUSING $/ YR	HOUSING $/ HR	TOTAL PER HOUR	TOTAL COSTS PER HOUR
COL. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
8½' Wide																						
12 x 42	1942	130		15	0.0	0.00		77	100	0.77	0.77	90	117	0.90	561	84	0.65	0.01		0.00	1.56	2.33
14 x 42	2140	130		15	0.0	0.00		77	110	0.85	0.85	90	129	0.99	618	93	0.71	0.01		0.00	1.72	2.57
16 x 42	2332	130		15	0.0	0.00		77	120	0.92	0.92	90	141	1.08	673	101	0.78	0.01		0.00	1.87	2.80
16 x 48	2833	130		15	0.0	0.00		77	146	1.12	1.12	90	171	1.31	818	123	0.94	0.02		0.00	2.27	3.40
18 x 48	3258	130		15	0.0	0.00		77	168	1.29	1.29	90	196	1.51	941	141	1.09	0.02		0.00	2.61	3.91
18 x 60	3534	130		15	0.0	0.00		77	182	1.40	1.40	90	213	1.64	1021	153	1.18	0.02		0.00	2.84	4.24
20 x 48	3637	130		15	0.0	0.00		77	188	1.44	1.44	90	219	1.69	1050	158	1.21	0.02		0.00	2.92	4.36
20 x 60	3822	130		15	0.0	0.00		77	197	1.52	1.52	90	230	1.77	1104	166	1.27	0.02		0.00	3.07	4.58
22 x 48	3931	130		15	0.0	0.00		77	203	1.56	1.56	90	237	1.82	1135	170	1.31	0.02		0.00	3.15	4.71
22 x 60	4304	130		15	0.0	0.00		77	222	1.71	1.71	90	259	2.00	1243	186	1.43	0.02		0.00	3.45	5.16
24 x 48	4421	130		15	0.0	0.00		77	228	1.75	1.75	90	266	2.05	1277	192	1.47	0.03		0.00	3.55	5.30
24 x 60	4828	130		15	0.0	0.00		77	249	1.91	1.91	90	291	2.24	1394	209	1.61	0.03		0.00	3.87	5.79

NOTES AND COMMENTS

Prices and costs are average figures. Costs per hour must be interpreted for any machine over estimated life and annual hourly use.

Calculations

Col. 7 = Col. 6 x Price of fuel per gallon

Col. 8 = Col. 7 x .15 (diesel tractors)
- -gasoline and LP tractors based on diesel tractors
- -estimated lubrication cost for other equipment

Col. 9 = Repairs and maintenance as a percentage of list price for estimated life years and hours used per year.

$$\text{Col.10} = \frac{\text{Col. 2 x Col. 9}}{\text{Col. 5}}$$

$$\text{Col.11} = \frac{\text{Col. 10}}{\text{Col. 3}}$$

Col.12 = Col. 7 + Col. 8 + Col. 11

Col.13 = Depreciation as a percentage of list price for estimated life years.

$$\text{Col.14} = \frac{\text{Col. 13 x Col. 2}}{\text{Col. 5}}$$

$$\text{Col.15} = \frac{\text{Col. 14}}{\text{Col. 3}}$$

$$\text{Col.16} = \text{Yrs. Life} \frac{\sum_{n=1} \frac{\text{(Val. Beg. Yr. n + Val. End Yr. n}}{2}}{\text{Col. 5}}$$

Col.17 = Col. 16 x .125

$$\text{Col.18} = \frac{\text{Col. 17}}{\text{Col. 3}}$$

$$\text{Col.19} = \frac{\text{Col. 16 x .0045}}{\text{Col. 3}}$$

Col.20 = 0.740 x estimated space requirement ($ft.^2$)

$$\text{Col.21} = \frac{\text{Col. 20}}{\text{Col. 3}}$$

Col.22 = Col. 15 + Col. 18 + Col. 19 + Col. 21

Col.23 = Col. 12 + Col. 22

Machinery Options

Machinery sold in Alberta includes the basic or standard equipment listed at the bottom of the appropriate pages in Section 2. The cost of this equipment is included in the average retail price and was considered before averaging the prices obtained from the manufacturer or implement dealer. Generally, deviations from the average price of a particular size machine is a reflection of the inclusion or exclusion of certain options. The following list may be useful when comparing similar machines and/or their prices. Price ranges are given where options are available on a wide range of machine sizes.

Table 7 TRACTOR EQUIPMENT LISTED BY H.P. CLASS[1]

TRACTORS: 2 WHEEL DRIVE: -Options Included

20-29 HP - Standard Transmission
Swinging Drawbar
11.2 x 24 rear

30-39 HP - As above plus:
12.4 x 24 rear

40-49 HP - As above plus:
3 Point Hitch
Differential Lock
Power Steering
14.9 x 28 rear

50-59 HP - As above plus:
16.9 x 28 rear

60-69 HP - As above plus:
1 Remote Hydraulic

70-80 HP - As above plus:
18.4 x 34 rear

[1]Based on March, 1982 Information

81-90 HP - As above plus:
Cab with Heat
100-110 HP - As above plus:
Dual Remote Hydraulic
Turbocharged
18.4 x 38 rear
120-129 HP - As above plus:
Cab with Air Conditioning
130-139 HP - As Above
140-149 HP - As Above
150-159 HP - As Above
160-179 HP - As Above Plus:
20.8 x 38 Dual Rear Tires
180-190 HP - As Above

TRACTORS: 4 WHEEL DRIVE: - Options Included

70 HP - Standard Transmission
Power Steering
Dual Remote Hydraulic
Independent PTO
3 Point Hitch
Ether Start
11.2 x 24 Tires
160-179 HP - As Above Plus:
Cab with Heat, Air Conditioning
Dual 18.4 x 38
180-200 HP - As Above
201-214 HP - As Above
215-239 HP - As Above Plus:
Differential Lock
Triple Remote Hydraulic
240-260 HP - As Above
261-280 HP - As Above
300-335 HP - As Above

LAWN AND GARDEN TRACTORS: - Options Included

Electric Start
Lights Above 10 HP
Minimum One Drive for Attachments
Less Attachments
Less Sales Tax

MOLDBOARD PLOWS

Tandem Hitch	$1,150

ROTARY TILLER

Transport Without Tires	$1,401

DRILL FILL

Control Valve	$ 120

BALER

Bale Tension	$ 630
Turner	$ 186

FORAGE HARVESTER

Corn Headers - 2 row	$4,655
- 3 row	$8,379
Header	$3,192
Metal Detector	$2,660
Pick-up - 5'5	$2,660
- 7	$4,256
Pick-up, Auger Base	$1,995

STACK MOVER

Shredder - feeder	$11,843

COMBINES: - SELF-PROPELLED: - Options Included

Class 1 - Cab with Heat
Monitors
Chopper
Diesel Motor

Class 2 - As Above Plus:
Stone Trap
Cab with Air Conditioning

Class 3 - As above

Class 4 - Hydro Drive

Options -	Cab	$2,193
	Hydro Drive	$4,553-$5,870
	Row Crop Head	$15,480

PTO COMBINE

Options Included - Stone Trap
- Chopper
- Monitors

AXIAL FLOW

Options Included - Diesel Motor
- Spreader
- Cab with Heat, Air Conditioning
- Monitors

SELF-PROPELLED SWATHER

Options -	Cab with Heat	$ 2,577-$3,104
	Cab with Air Conditioning	$ 1,241
	Diesel Motor	$ 3,725
	Per Foot of Platform	$ 189
	Header	$ 8,695
	Crimper	$18,629

MIX MILL

Electronic Scale	$2,200
Hay Feed, Auger Feed	$ 910

ROLLER MILL

6' Auger Extension	$ 197
9' Auger Extension	$ 30

MIXER FEEDER WAGON (BUNK FEEDER)

Electronic Scale	$ 2,472-$3,027

GRAIN AUGER

PTO	$ 241-$482

PNEUMATIC GRAIN MOVER

6" x 10' Metal Hose	$128
6" x 10' Rubber Hose	$410
6" x 15' Flexible Rubber Hose for Clean-up	$436

TRUCK - Options Included

1/2 Ton 4,800-6,100 GVW

Rear Step Bumper
Rear Grip Tires
Heavy Duty Shocks
Gauges
High Output Heater
Mirrors
Radio
Lighter
Power Steering
Power Brakes
4 Speed Transmission
Antifreeze

3/4 Ton 6,400-8,600 GVW

As Above Plus:
Spare Tire (extra cost)

1 Ton 10,000 GVW

Cab and Chassis only
As Above Plus:
Dual Rear Tires
Block Heaters

3 Ton 24,000-28,000 GVW

As Above Plus:
5 Speed Transmission
2 Speed Rear Axle

Tandem 34,000-50,000 GVW

Gas
Air or Power Brakes
5 x 4 Transmission
Shutters
Dual Fuel Tank
Antifreeze
Heavy Duty Springs
Heavy Duty Shocks
Block Heaters
Power Steering

Option:	
Full Air Brakes	$3,300
Diesel	
As Above plus:	
Cold Start	

TRUCK - Option Price List

1/2 Ton	- Power Steering	$ 289
	- Power Brakes	$ 108
	- Automatic Transmission	$ 534
	- 4 Speed	$ 245
	- 3 Speed	STANDARD
	- Auxilary Tank	$ 293
	- Radio	$ 148
	- CB	$ 493
3/4 Ton	- Rear Step	$ 131
	- V-8	$ 429
	- Spare Wheel w/Tire	$ 261
1 Ton	- Automatic	$ 578
	- Spare Tire	$ 216
	- Auxilary Tank	$ 293

Truck Hoist

Installation		$ 270-$585

Steel Truck Box

Stock Racks	12	$ 707
	14	$ 732
	16	$ 853
	18	$ 881
	20	$ 929
	22	$ 957
	24	$1012

Classification of Combine Sizes

Combines have been placed into four classes according to cleaning and separating areas as reported by the Implement and Tractor Red Book, the Guide to Combine Specifications, August 1981 in "Grainews" and according to information reported by implement sales organizations and farmers. The grouping should be considered as approximate only as varying combinations of conditions may favour one particular machine at one time and another at a different time.

Combines - Self Propelled

Class 1 - Total separating and cleaning area	7,000-10,000	in^2
cleaning area	3,000- 4,000	in^2
Class 2 - Total separating and cleaning area	10,000-13,000	in^2
cleaning area	4,000- 5,000	in^2
Class 3 - Total separating and cleaning area	13,000-14,000	in^2
cleaning area	5,000- 6,000	in^2
Class 4 - Total separating and cleaning area over	14,000	in^2
cleaning area over	6,000	in^2

Combines - Power Take Off Driven

Class 1 - Total separating and cleaning area	9,000-11,000	in^2
cleaning area	3,500- 4,500	in^2
Class 2 - Total separating and cleaning area	11,000-13,000	in^2
cleaning area	4,500- 5,500	in^2
Class 3 - Total separating and cleaning area over	13,000	in^2
cleaning area over	5,500	in^2

SECTION III
METHODS AND PROCEDURES FOR CALCULATING COSTS AT VARIOUS HOURS OF USE AND YEARS OF OWNERSHIP

APPLICATIONS

This Section has been designed to assist the farm operator in machinery management and decision-making. It attempts to explain the use of machinery costs figures (presented in the previous section) in the analysis of leasing and purchasing farm machinery. Economic and non-economic factors both require consideration if enterprise profits are to be maximized by realizing the greatest output per unit of cost. Too often, inadequate cost data have been used in determining the cost of machinery operations.

Due to the fact that the costs of owning and operating farm machinery is second highest only to land as a production input, the farm manager has no alternative but to consider different production methods which will enhance output and at the same time decrease costs on a per unit basis. The cost-price squeeze along with technological advances in farm machinery have caused farmers to look more closely at their machinery operations and evaluate alternative machine complements in order to maximize farming profits.

Before any major decision can be made with regards to machine purchasing, leasing or custom hiring, the farm operator should have some basic information at hand.

BASIC FACTORS

Field Efficiency: As indicated in Table 9, pages 128-130, machine efficiencies will be of greater use when evaluating the purchase of unfamiliar equipment. Field efficiencies can also be useful in determining machine size requirements.

Travel Speed: Machine capacities or field speeds can be determined from Table 9, pages 128-130. Machine performances may vary greatly with field conditions as indicated by the wide range of speed or capacities for some machines.

Acres Per Hours: Machine performance depends on speed of travel and machine efficiency. The information presented in Table 10, page 131, will be of great value to farm operators in scheduling their field operations, determining a custom charge, assisting in machine selection, etc. Acres per hour per 1 mile per hour speed is indicated in this Table for different field efficiences. Acres per hour for a 24-foot cultivator travelling 5 mile per hour with an efficiency of 80 per cent is 11.65 (that is 2.33x5.0).

Hours Per Year: Hourly machine use will determine the fixed costs on a per hour basis. By increasing the annual use of the machine, fixed costs (depreciation, interest, insurance, and housing) will be lowered on a per hour machine use basis. The cost data presented in Section 2 is based on a given annual use and may not represent your situation. Refer to Section 3 for hourly repair, depreciation, and interest costs per hour for varying hours of use per year up to a maximum of 20 years of life.

Depreciation, Opportunity Interest Costs and Repair Costs: These costs vary with the use of the machine. Therefore, it will be necessary to refer to Section 3 for farm machinery costs on a per hour per $1000 list price, at various hours of use per year up to a maximum of 20 years of life. The data provided in Section 2 will be applicable only if the assumed hours of use per year and expected machine life are identical to your operation.

Fuel, Lubrication, Insurance and Housing: Fuel and lubrication costs do not vary with use and are equal for each operating hour. Fuel consumption rates and costs are included in the tables in Section 2. Insurance and housing costs decrease on a per hour basis with increase annual use.

Fixed and Variable Costs: The following circle graph indicates the relative importance of the fixed and variable costs components for diesel tractors.

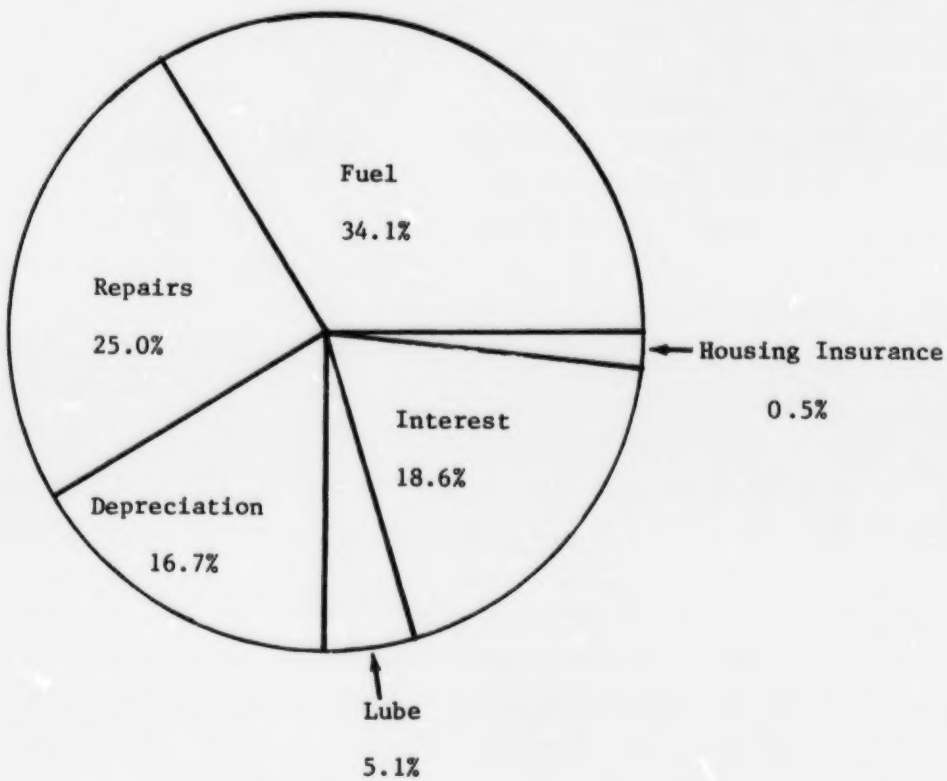
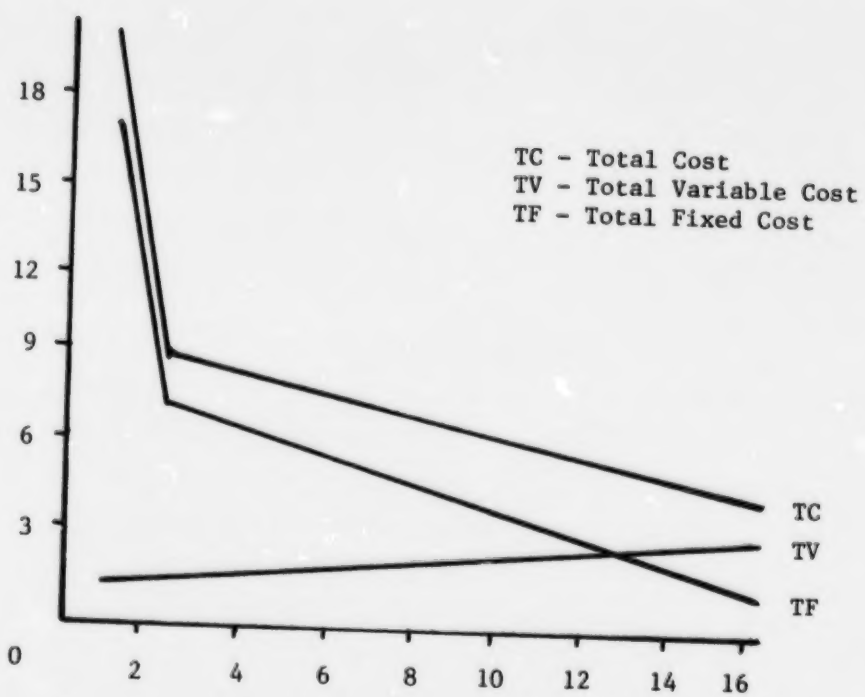


Figure 3 BREAKDOWN OF COST ITEMS
200 H.P. DIESEL TRACTOR

DECIDING WHEN TO TRADE

A number of factors require consideration when deciding on the best time to trade a machine. Usually this decision is quite obvious as time loss and/or technological advances make a machine obsolete, hence, making it necessary to trade so as to benefit the efficiency of the overall farming operation. There are times however, when this decision can become quite difficult especially when the existing piece of equipment is performing adequately but is costly in terms of repairs and general maintenance.

Figure 4 - Typical Cost Curves



It is suggested that the farm operator seriously consider monitoring ownership and operating costs to determine the optimum length of time of ownership. Studying this aspect will determine whether trading-in is economically feasible before the life of the machine is over. Average fixed costs per year decrease as the machine gets older whereas, repair costs increase. That is, at some point in time, the increase in repair costs is greater than the decrease in fixed costs. Identification of this switching point will help establish the time when the machine should be traded so that average costs may be minimized over the life of the machine.

In addition to studying the rate of increase in repair costs when contemplating trading, other factors such as, limited machine capacity, out-dated techniques, lower efficiency, tax advantages, etc., must also be taken into account. The farm operator must therefore assess these factors according to his particular situation before making the trade.

Making a decision for machinery replacement is probably one of the most important decisions a machinery manager must make and is usually dealt with when:

1. the implement has been damaged beyond repair;
2. a new farm practice makes the existing machine obsolete;
3. new machine design makes it a much superior performer;
4. through farm expansion the field capacity for the machine is inadequate;
5. costs of operating the old machine exceed those for a replacement machine.

CUSTOM FARM RATES

The farm operator in the process of expanding his operation often rely on custom hiring so as to minimize the capital outlay associated with machine ownership. By doing this, capital can be made available for other parts of the operation. Also, consideration should be given to the fact that the costs of custom hiring is totally tax deductible.

Custom work is increasing significantly and will continue to increase as rising fuel, repair and general machine prices narrow the profit margin. The availability of current detailed cost information is

desirable when the custom operator is establishing his custom rates. Custom rates actually charged by the custom operator relies on the extent to which the custom operator depends on this kind of work to earn his livelihood. The full-time custom operator must not only cover all fixed and variable costs associated with machine ownership but also, add a profit margin. On the other hand, for the part-time custom operator who is generally working on a neighbourly basis, he may only wish to cover his variable costs.

The following format can be used in determining a fair custom charge. It will assist in establishing a charge that represents only those costs items that the farm operator wishes to cover. Table 8, illustrates how to determine a custom charge for cultivating.

Table 8 - COMPUTATION OF CUSTOM RATES

		Power Unit	Implement	Total
1.	Machine	Tractor	Cultivator	
2.	Size	200 H.P.	39 Ft.	
3.	Years Use	15	15	
4.	Hours Per Year	800	160	
5.	Purchase Price	$84276.00	$18513.00	
6.	Hourly Ownership Cost	$ 12.61	$ 12.59	
7.	Hourly Repair Cost	$ 8.43	$ 8.77	
8.	Hourly Fuel and Lube Cost	$ 11.55	$ 0.05	
9.	Total Machine Costs (6+7+8)	$ 32.59	$ 21.41 =	$54.00/hr.
10.	Hourly Labour Cost			$ 6.50/hr.
11.	Total Costs Per Hour			$60.50/hr.
12.	Total Costs Per Acre (22.7 cc./hr.)			$ 2.67/ac.
13.	Adjustment for risk, moving, overhead, profit margin (10% to 25%)		10% rate	25% rate
14.	Custom Rate		$ 66.55/hr.	$73.63/hr.
			$ 2.98/ac.	$ 3.33/ac.

The full-time custom operator should charge a rate of $2.98 to $3.33 per acre if all costs are to be covered. A part-time operator may charge $1.12 per acre, if he is only interested in covering the variable and labour costs.

Deciding whether to custom hire or buy a particular machine is another exercise which relies upon the availablity of current and detailed cost data. The following formula can be used in determining the number of acres or annual hourly use required, beyond which ownership would be more profitable than custom hiring.

$$\text{Break-Even Point} = \frac{\text{Annual Fixed Costs}}{\text{Custom Rate/Hr. - Variable Cost/Hr.}}$$

For Example: A larger size combine is required for a grain farm. The going rate for custom combining is $120 per hour. How many hours annually must the combine be used to justify its purchase?

Annual Fixed Costs	Depreciation	$7128.00
	Interest	4902.00
	Insurance	85.00
	Housing	143.00
	TOTAL	$13258.00
Variable Costs ($/Hr.)	Labour	$ 6.50
	Fuel	10.00
	Lubrication	1.50
	Repairs	26.65
	TOTAL	$ 44.65

$$\text{Break-Even Point} = \frac{\$13258.00}{\$120.00 - \$44.65} = 176 \text{ Hours}$$

The combine purchased must be used approximately 176 hours per year, if costs of owning the combine are to equal the custom rate. In terms of acreage - at 5.5 acres per hour, approximately 968 acres of crop would be required for harvesting.

In addition, must evaluate and weigh factors other than the overall costs when deciding whether to purchase or depend on custom hiring. Some of the factors to be considered are availability of custom operators, risk, and prestige. Farm operators in central and northern Alberta should keep in mind the weather pattern and emphasize the need for machine availability when required. Although custom rates are lower than ownership costs, one may feel that the savings experienced by custom hiring, fail to offset the risk of losing a crop when the custom service does not arrive on time.

EQUIPMENT SIZE

The following factors should be considered when calculating the size of equipment required:

1. Number of cropped acres;
2. Future plans with regard to size of operation;
3. Time allowable for the operation;
4. Maximum speed of the machine which is most effective;
5. Efficiency of the machine under different working conditions.

Optimum size can be calculated using the following formula:

$$\text{acres per hour} = \frac{\text{m.p.h. x width in feet}}{8.25}$$

$$\text{width (in feet)} = \frac{\text{acres/hour x } 8.25}{\text{m.p.h.}}$$

For Example: 500 acres are to be swathed. Through past experience, 10 seven-hour days are usually available for this operation. Given these constraints, actual average rate of swathing will have to be 500 ÷ 70 = 7.14 acres per hour. Allowing a 20 per cent time factor (80 per cent efficiency) for breakdowns, the machine capacity will have to be 7.14 ÷ 0.8 = 8.93 acres per hour. Average speed of travel for swathing is 5 m.p.h.

$$\text{width (in feet)} = \frac{8.93 \times 8.25}{5}$$

$$= 14.73 \text{ ft.}$$

Theoretically speaking a 15 foot swather will be required. However, some reserve capacity may be required to adjust for soil and weather conditions. Additional expenditure for a larger machine should be justified by the timeliness of operations.

SUMMARY

The objective of this report is to provide the farm manager with a data base and framework for analyzing the economic aspect of farm machine use. Farm machinery prices are increasing steadily and the cost-price squeeze in effect has limited the amount of capital available for machine buying. Therefore operators need to carefully evaluate the cost of owning machinery. Machine operators should also look more closely at the options of renting, leasing and custom work before purchasing their equipment.

Section III of this report was designed to provide a framework for assisting the farm operator in making a decision regarding farm equipment use. Field efficiency data for unfamiliar equipment can be obtained from this section along with a list of machine options that are available. Deciding when to trade may not only depend on costs alone as other factors, such as limited machine capacity, outdated techniques, lower efficiencies, taxation, etc. must be taken into account.

Custom rates vary extensively, depending upon the extent to which the operator relies on custom work to earn a livelihood. A full-time custom operator must not only cover all fixed and variable costs associated with the machine but also add a profit margin if he is to remain in business. The section on "Custom Farm Rates" on page will help the operator to either establish his own custom rate or to determine whether a custom charge available to him is reasonable.

Taxation matters require some attention when determining the true effect of machine purchasing and machine trading. Capital cost allowance and the tax investment credit will apply to new machine purchases, while capital gains or losses and recapture of cost allowances will usually result when old machines are sold.

This publication provides an estimate of costs for owning and operating farm equipment in Alberta and users of this report are advised to substitute more appropriate data, if available, to represent their particular situation.

Table 9 MACHINE EFFICIENCIES AND PERFORMANCE

MACHINE	FIELD EFFICIENCY		SPEED TRAVEL AND PERFORMANCE	
	Range %	Average %	Range	Average
TILLAGE MACHINES				
Chisel Plow	75 - 90	80	3.5 - 6.5 mph	5.0 mph
Econorod	75 - 90	80	3.5 - 8.0	5.5
Field Cultivator	70 - 90	80	3.0 - 8.0	5.5
Mulcher	75 - 90	85	5.0 -10.0	7.5
Roller Harrow	70 - 90	80	5.0 - 8.0	6.0
Discer	70 - 90	80	5.0 - 8.0	6.0
Disc: Tandem	75 - 90	85	3.5 - 6.5	4.5
Offset	70 - 90	80	3.0 - 6.0	3.9
Drawbar (Harrow)	70 - 85	80	3.5 - 6.0	3.9
Rod Weeder	70 - 90	80	4.0 - 6.0	5.2
MoldBoard Plow	75 - 85	80	3.5 - 6.0	4.1
Rotary Tiller	60 - 90	70	1.0 - 5.0	3.0
Stubble Treader	70 - 90	80	4.0 - 6.0	3.9
GRAIN DRILLS				
Stn'd End Wheel	65 - 80	75	5.0 - 7.0	5.5
Press Drill	70 - 80	75	3.0 - 7.0	5.0
Air Seeder	70 - 80	75	3.0 - 7.0	5.0
ROW CROP EQUIPMENT				
Cultivator	70 - 90	80	2.0 - 5.0	3.6
Planter:				
Beet and Corn	60 - 85	70	3.5 - 6.0	4.3
Potato	60 - 80	70	2.0 - 4.0	3.0
Harvester:				
Sugar Beet	60 - 80	70	2.5 - 5.0	3.8
Vegetable	60 - 80	65	1.0 - 2.0	1.5
Green Pea	60 - 80	75	0.1 - 1.0	0.6
Sweet Corn	60 - 70	65	1.0 - 3.0	2.5
Potato	60 - 70	65	2.0 - 3.0	2.5

Table 9 - cont'd

MACHINE	FIELD EFFICIENCY		SPEED TRAVEL & PERFORMANCE	
	Range %	Average %	Range	Average
ROW CROP EQUIPMENT (cont'd)				
Defoliator	60 - 80	70	2.0 - 3.0	2.5
Top Saver	70 - 90	80	3.0 - 4.0	3.5
Ridger	70 - 90	80	2.0 - 5.0	3.6
Thinner	80 - 90	85	3.5 - 5.0	4.0
Sprayer	50 - 80	75	3.0 - 5.0	4.0
Potato Piler			40-60 Tons/Hr.	45 Tons/Hr.
Potato Scooper			40-60 Tons/Hr.	45 Tons/Hr.
Potato Seed Cutter	36"		4-5 Tons/Hr.	-
HAY MACHINERY				
Baler	60 - 85	75	5-10 Tons/Hr.	5.5
Bale Elevator	60 - 80	70	30-50 Tons/Hr.	-
Bale Stooker	60 - 85	75	30-50 Tons/Hr.	5.5
Bale Wagon	75 - 85	80	3.0 - 6.0	4.5
Big Bale Mover			-	-
Cuber	60 -85	75	3- 5 Tons/Hr.	-
Forage Box	50 - 80	60	5-10 Tons/Hr.	-
Forage Blower			20-30 Tons/Hr.	-
Forage Chopper	50 - 75	65	5-10 Tons/Hr.	6.0
Forage Harvester	50 - 80	65	2.0 - 4.0	2.8
Hay Stacker	60 - 90	75	7-24 Tons/Hr.	-
Hay Stacking Wagon	65 - 80	75	9-15 Tons/Hr.	-
Mower	75 - 85	80	5.0 - 7.0	6.5
Mower Conditioner	70 - 85	75	3.5 - 6.0	5.0
Rake	70 - 85	75	3.5 - 7.0	4.5
Stack Mover			5-10 Tons/Hr.	-
Swather (Forage)	75 - 85	80	5.0 - 7.0	5.5
GRAIN HARVEST MACHINES				
Combine: S.P.	65 - 80	75	4.0 - 8.0	6.0
P.T.O.	65 - 80	75	3.5 - 7.0	4.5
Corn Header	65 - 80	75	3.5 - 8.0	5.0
Swather: Grain				
Pull Type	60 - 80	70	4.0 - 6.0	4.2
S.P.	75 - 85	80	5.0 - 7.0	5.5

Table 9 - cont'd

MACHINE	FIELD EFFICIENCY		SPEED TRAVEL & PERFORMANCE	
	Range %	Average %	Range	Average
IRRIGATION EQUIPMENT				
Ditcher	80 - 90	85	2.0 - 4.0	3.0
Ditch Filler	80 - 90	85	2.0 - 4.0	3.0
Land Leveller	80 - 90	85	2.0 - 4.0	3.0
Land Plane	80 - 95	90	4.0 - 5.0	4.5
FEEDING AND FEED HANDLING EQUIPMENT				
Mixer Mill			7-10 Tons/Hr.	
Mixer Feeder Wagon			5-10 Tons/Hr.	
Roller Mill			180-660 Bus./Hr.	
Stack Feeder			10-20 Tons/Hr.	
Tub-mill			10-20 Tons/Hr.	
MISCELLANEOUS MACHINES			Bu. / Hr.	
Auger: 4"[1]			150 - 270	210.0
5"			250 - 650	450.0
6"			520 - 740	620.0
7"			700 -1000	850.0
8"			925 -1145	1135.0
10"			2500 -4000	3000.0
Grain Dryers			150 - 250	200.0
			350 - 500	400.0
			650 - 750	700.0
			over 800	
Packer	70 - 90	75	5.0 - 7.0	6.0
Sprayer: -Field	55 - 80	75	4.5 - 6.5	5.0
-SP Sprayer			15 - 20 mph	16.0
Spreader:				
Dry Fertilizer	60 - 75	70	3.0 - 5.0	4.0
Herbicide Appli.	60 - 75	70	3.0 - 5.0	4.0
Manure	70 - 80	75	3.0 - 5.0	4.0
Sub Soiler	70 - 90	80	3.5 - 6.0	4.5
Anhydrous NH ammonia	55 - 65	60	3.5 - 5.5	5.0
Rotary Chopper	65 - 85	70	3.5 - 6.5	5.0
Fertilizer Spreader	60 - 90	75	4.0 - 6.0	5.0

[1] Bushels of wheat per hour at 40° elevation.

Table 10 ACRES PER HOUR AT 1 MILE PER HOUR FOR VARIOUS FIELD EFFICIENCIES

WIDTH* IN FEET	FIELD EFFICIENCY (%)							
	55	60	65	70	75	80	85	90
1	.07	.07	.08	.08	.09	.10	.10	.11
2	.13	.14	.16	.17	.18	.19	.20	.22
3	.20	.22	.23	.25	.27	.29	.31	.32
4	.26	.29	.31	.34	.36	.38	.41	.43
5	.34	.37	.40	.43	.46	.49	.52	.55
6	.40	.44	.47	.51	.55	.58	.62	.66
7	.47	.51	.55	.60	.64	.68	.72	.77
8	.53	.58	.63	.68	.73	.78	.82	.87
9	.60	.65	.71	.76	.82	.87	.93	.98
10	.67	.73	.79	.85	.91	.97	1.03	1.09
11	.73	.80	.86	.93	1.00	1.06	1.13	1.20
12	.80	.87	.94	1.02	1.09	1.16	1.23	1.31
13	.87	.95	1.03	1.11	1.19	1.26	1.34	1.42
14	.94	1.02	1.11	1.19	1.28	1.36	1.45	1.53
15	1.00	1.09	1.18	1.27	1.37	1.46	1.55	1.64
16	1.07	1.16	1.26	1.36	1.46	1.55	1.65	1.75
17	1.13	1.24	1.34	1.44	1.55	1.65	1.75	1.85
18	1.20	1.31	1.42	1.53	1.64	1.74	1.85	1.96
19	1.27	1.38	1.50	1.61	1.73	1.84	1.96	2.07
20	1.33	1.45	1.57	1.69	1.82	1.94	2.06	2.18
21	1.40	1.53	1.66	1.79	1.91	2.04	2.17	2.30
22	1.47	1.60	1.74	1.87	2.00	2.14	2.27	2.40
23	1.53	1.67	1.81	1.95	2.09	2.23	2.37	2.51
24	1.60	1.75	1.89	2.04	2.18	2.33	2.47	2.62
25	1.67	1.82	1.97	2.12	2.27	2.42	2.58	2.73
26	1.73	1.89	2.05	2.21	2.36	2.52	2.68	2.84
27	1.80	1.96	2.13	2.29	2.45	2.62	2.78	2.94
28	1.86	2.03	2.20	2.37	2.54	2.71	2.88	3.05
29	1.94	2.11	2.29	2.46	2.64	2.82	2.99	3.17
30	2.00	2.18	2.37	2.55	2.73	2.91	3.09	3.28

(cont'd)

Table 10 - cont'd

WIDTH IN FEET	FIELD EFFICIENCY (%)							
	55	60	65	70	75	80	85	90
31	2.07	2.26	2.44	2.63	2.82	3.01	3.20	3.38[2]
32	2.13	2.33	2.52	2.72	2.91	3.10	3.30	3.44
33	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60
34	2.27	2.47	2.68	2.88	3.09	3.30	3.50	3.71
35	2.33	2.54	2.76	2.97	3.18	3.39	3.60	3.82
36	2.40	2.62	2.83	3.05	3.27	3.49	3.71	3.92
37	2.46	2.69	2.91	3.14	3.36	3.58	3.81	4.03
38	2.54	2.77	3.00	3.23	3.46	3.69	3.92	4.15
39	2.60	2.84	3.07	3.31	3.55	3.78	4.02	4.26
40	2.67	2.91	3.15	3.40	3.64	3.88	4.12	4.37
41	2.74	2.98	3.23	3.48	3.73	3.98	4.22	4.48
42	2.80	3.06	3.32	3.58	3.82	4.08	4.34	4.60
43	2.87	3.13	3.38	3.65	3.91	4.17	4.43	4.69
44	2.94	3.20	3.48	3.74	4.00	4.28	4.54	4.80
45	3.01	3.28	3.55	3.83	4.10	4.37	4.64	4.92
46	3.07	3.35	3.62	3.91	4.19	4.46	4.74	5.03
47	3.14	3.42	3.70	4.00	4.28	4.56	4.84	5.14
48	3.20	3.50	3.78	4.08	4.36	4.66	4.94	5.24
49	3.27	3.56	3.86	4.16	4.46	4.75	5.05	5.35
50	3.34	3.64	3.94	4.24	4.54	4.84	5.16	5.46
51	3.40	3.71	4.01	4.33	4.64	4.94	5.25	5.57
52	3.46	3.78	4.10	4.42	4.72	5.04	5.36	5.68
53	3.54	3.86	4.18	4.51	4.83	5.14	5.46	5.79
54	3.60	3.92	4.26	4.58	4.90	5.24	5.56	5.88
55	3.67	4.00	4.33	4.67	5.01	5.34	5.67	6.01
56	3.72	4.06	4.40	4.74	5.08	5.42	5.76	6.10
57	3.80	4.15	4.49	4.84	5.19	5.53	5.87	6.22
58	3.88	4.22	4.58	4.92	5.28	5.64	5.98	6.34
59	3.94	4.29	4.65	5.01	5.37	5.72	6.08	6.44
60	4.00	4.36	4.74	5.10	5.46	5.82	6.18	6.56

* For widths over 60' add two or more field efficiency factors together.

TABLE D.1

ANNUAL DEPRECIATION COST

$ PER HOUR PER $1000 NEW COST

T.A.D. AS % OF NEW COST = 100 - [68.0(0.92)^n]
T.A.D. = TOTAL ACCUMULATED DEPRECIATION
n = YEARS

MACHINES - TRACTORS

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
200	1.87	0.25	0.23	0.21	0.19	0.18	0.16	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.08	0.08	0.07	0.07	0.06	0.06
250	1.50	0.20	0.18	0.17	0.16	0.14	0.13	0.12	0.11	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04
300	1.25	0.17	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04
350	1.07	0.14	0.13	0.12	0.11	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03
400	0.94	0.13	0.12	0.11	0.10	0.09	0.08	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03
450	0.83	0.11	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02
500	0.75	0.10	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02
550	0.68	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02
600	0.62	0.08	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
650	0.58	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02
700	0.53	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
750	0.50	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01
800	0.47	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01
850	0.44	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
900	0.42	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
950	0.39	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
1000	0.37	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01

ANNUAL INTEREST COST

TABLE I.1

MACHINES - TRACTORS

$ PER HOUR PER $1000 NEW COST

(INTEREST RATE = 15.0%)

HRS \ YRS:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
200	0.61	0.45	0.41	0.38	0.35	0.32	0.30	0.27	0.25	0.23	0.21	0.20	0.18	0.17	0.15	0.14	0.13	0.12	0.11	0.10
250	0.49	0.36	0.33	0.30	0.28	0.26	0.24	0.22	0.20	0.18	0.17	0.16	0.14	0.13	0.12	0.11	0.10	0.09	0.09	0.08
300	0.41	0.30	0.28	0.25	0.23	0.22	0.20	0.18	0.17	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.09	0.08	0.07	0.07
350	0.35	0.26	0.24	0.22	0.20	0.18	0.17	0.16	0.14	0.13	0.12	0.11	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.06
400	0.30	0.23	0.21	0.19	0.18	0.16	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.08	0.08	0.07	0.06	0.06	0.05	0.05
450	0.27	0.20	0.18	0.17	0.16	0.14	0.13	0.12	0.11	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04
500	0.24	0.18	0.17	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04
550	0.22	0.16	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04
600	0.20	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03
650	0.19	0.14	0.13	0.12	0.11	0.10	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03
700	0.17	0.13	0.12	0.11	0.10	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03
750	0.16	0.12	0.11	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03
800	0.15	0.11	0.10	0.10	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03
850	0.14	0.11	0.10	0.09	0.08	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02
900	0.14	0.10	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02
950	0.13	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02
1000	0.12	0.09	0.08	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02

TABLE D.2
GROUP 1

MACHINES - COMBINE
COMBINE PICKUP
SKID STEER LOADER
SWATHER
MOWER CONDITIONER
TILT BOX
WAGON

ANNUAL DEPRECIATION COST

$ PER HOUR PER $1000 NEW COST

T.A.D. AS % OF NEW COST = 100 - [64.0(.885)^n]
T.A.D. = TOTAL ACCUMULATED DEPRECIATION
n = YEARS

HRS / YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	21.68	3.26	2.88	2.55	2.26	2.00	1.77	1.56	1.38	1.23	1.08	0.96	0.85	0.75	0.67	0.59	0.52	0.46	0.41	0.36
40	10.84	1.63	1.44	1.28	1.13	1.00	0.88	0.78	0.69	0.61	0.54	0.48	0.42	0.38	0.33	0.29	0.26	0.23	0.20	0.18
60	7.23	1.09	0.96	0.85	0.75	0.67	0.59	0.52	0.46	0.41	0.36	0.32	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12
80	5.42	0.81	0.72	0.64	0.56	0.50	0.44	0.39	0.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09
100	4.34	0.65	0.58	0.51	0.45	0.40	0.35	0.31	0.28	0.25	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07
120	3.61	0.54	0.48	0.43	0.38	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06
133	3.26	0.49	0.43	0.38	0.34	0.30	0.27	0.24	0.21	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05
140	3.10	0.47	0.41	0.36	0.32	0.29	0.25	0.22	0.20	0.18	0.15	0.14	0.12	0.11	0.10	0.08	0.07	0.07	0.06	0.05
160	2.71	0.41	0.36	0.32	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05
167	2.60	0.39	0.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04
180	2.41	0.36	0.32	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04
200	2.17	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.08	0.08	0.07	0.06	0.05	0.05	0.04	0.04
220	1.97	0.30	0.26	0.23	0.21	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03
240	1.81	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03
260	1.67	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03

TABLE I.2

GROUP I

ANNUAL INTEREST RATE

$ PER HOUR PER $1000 NEW COST

(INTEREST RATE = 15.0%)

MACHINES - COMBINE
COMBINE PICKUP
SKID STEER LOADER
SWATHER
MOWER CONDITIONER
TILT BOX
WAGON

HRS	YRS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	5.87	4.00	3.54	3.14	2.78	2.46	2.17	1.92	1.70	1.51	1.33	1.18	1.04	0.92	0.82	0.72	0.64	0.57	0.50	0.44
40	2.94	2.00	1.77	1.57	1.39	1.23	1.09	0.96	0.85	0.75	0.67	0.59	0.52	0.46	0.41	0.36	0.32	0.28	0.25	0.22
60	1.96	1.33	1.18	1.05	0.93	0.82	0.72	0.64	0.57	0.50	0.44	0.39	0.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15
80	1.47	1.00	0.89	0.78	0.69	0.61	0.54	0.48	0.43	0.38	0.33	0.30	0.26	0.23	0.20	0.18	0.16	0.14	0.13	0.11
100	1.17	0.80	0.71	0.63	0.56	0.49	0.43	0.38	0.34	0.30	0.27	0.24	0.21	0.18	0.16	0.14	0.13	0.11	0.10	0.09
120	0.98	0.67	0.59	0.52	0.46	0.41	0.36	0.32	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07
133	0.88	0.60	0.53	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07
140	0.84	0.57	0.51	0.45	0.40	0.35	0.31	0.27	0.24	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06
160	0.73	0.50	0.44	0.39	0.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06
167	0.70	0.48	0.42	0.38	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05
180	0.65	0.44	0.39	0.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05
200	0.59	0.40	0.35	0.31	0.28	0.25	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04
220	0.53	0.36	0.32	0.29	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04
240	0.49	0.33	0.30	0.26	0.23	0.20	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04
260	0.45	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03
280	0.42	0.29	0.25	0.22	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03
300	0.39	0.27	0.24	0.21	0.19	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03
350	0.34	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03

TABLE D.3

GROUP 1

ANNUAL DEPRECIATION COST

$ PER HOUR PER $1000 NEW COST

T.A.D. AS % NEW COST = 100 - [64.0(.885)^n]

MACHINES - IRRIGATION SYSTEMS MAIN LINE PUMPING UNIT
MOTOR TRANSPORT PIPE TRAILER

HRS	YRS1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
200	2.17	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.08	0.08	0.07	0.06	0.05	0.05	0.04	0.04
250	1.73	0.26	0.23	0.20	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03
300	1.45	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02
350	1.24	0.19	0.16	0.15	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02
400	1.08	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02
450	0.96	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02
500	0.87	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01
550	0.79	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
600	0.72	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
650	0.67	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
700	0.62	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
750	0.58	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
800	0.54	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
850	0.51	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
900	0.48	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
950	0.46	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
1000	0.43	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01

TABLE 8.9

GROUP 3

ANNUAL INTEREST RATE

$ PER HOUR PER $1000 NEW COST

(INTEREST RATE = 15.0%)

MACHINES - IRRIGATION SYSTEMS MAIN LINE PUMPING UNIT
MOTOR TRANSPORT PIPE TRAILER

	YRS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRS																				
200	0.50	0.40	0.35	0.31	0.28	0.25	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04
250	0.41	0.32	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04
300	0.39	0.27	0.24	0.21	0.19	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03
350	0.34	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03
400	0.29	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02
450	0.26	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02
500	0.23	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02
550	0.21	0.15	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02
600	0.20	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01
650	0.18	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01
700	0.17	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
750	0.16	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01
800	0.15	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
850	0.14	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
900	0.13	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
950	0.12	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
1000	0.12	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
1050	0.11	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01

TABLE D.4

GROUP 2

ANNUAL DEPRECIATION COST

$ PER HOUR PER $1000 NEW COST

T.A.D. AS % OF NEW COST = 100 [60.0(0.885)^n]
T.A.D. = TOTAL ACCUMULATED DEPRECIATION
n = YEARS

MACHINES -
ALL TERRAIN VEHICLES
ANHYDROUS APPLICATORS
BALE MOVER
BALE STOOKERS
BALE WAGON
BEET HARVESTER
BEET DEFOLIATER
BEET TOPPER
BEET-TOP SAVER
BEET THINNER
CATTLE SCALE
CATTLE SQUEEZE
CHISEL PLOWS
COLD FLOW CONVERTER
CULTIVATORS
- NOBLE BLADE
- FIELD
- VIBRASHANK
- ROW-CROP
DELEVAN KIT
DISCS
DISCERS
DITCHERS
DRILLS
DOZER BLADES
ENGINES - AIR COOLED
ELECTRIC MOTORS
FORAGE BLOWERS
FORAGE BLOWER-PROCESSOR
FORAGE CHOPPERS
GENERATORS
GARDEN TRACTOR ATTACHMENTS
GRAIN BOXES
GRAIN DRYERS
GRANULAR HERBICIDE KITS
HARROWS
HORROW DRAWBARS
HAYSTACKER
HYDRAULIC LOADER
LAND PLANES
MOTORCYCLES
MOWERS
MOWER CONDITIONERS
PACKERS
PACKER DRAWBARS
PLANTERS-POTATO
-SUGAR BEET
-CORN
SNOWMOBILES
3 WHEEL BIKES
PLOWS
POST AUGERS
POST DRYERS
POTATO HARVESTER
POTATO PILER
POTATO SEED-CUTTER
POTATO SCOOPER
PULVIMULCHER
RAKES
ROCK PICKERS
ROCK WINDROWERS
ROD WEEDERS
ROTARY CUTTERS
ROTARY TILLERS
SILAGE LOADER
SPRAYERS
STACK MOVER
SNOWBLOWERS
SPREADERS-FERTILIZER
MANURE
SUB SOILER
TRUCKS
TRUCK BOXES
TRUCK HOISTS

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	23.45	3.05	2.70	2.39	2.12	1.87	1.66	1.47	1.30	1.15	1.02	0.90	0.80	0.70	0.62	0.55	0.49	0.43	0.38	0.34
40	11.72	1.53	1.35	1.20	1.06	0.94	0.83	0.73	0.65	0.57	0.51	0.45	0.40	0.35	0.31	0.28	0.24	0.22	0.19	0.17
60	7.82	1.02	0.90	0.80	0.71	0.62	0.55	0.49	0.43	0.38	0.34	0.30	0.27	0.23	0.21	0.18	0.16	0.14	0.13	0.11
80	5.86	0.76	0.68	0.60	0.53	0.47	0.41	0.37	0.32	0.29	0.25	0.22	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.08
100	4.69	0.61	0.54	0.48	0.42	0.37	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07
120	3.91	0.51	0.45	0.40	0.35	0.31	0.28	0.24	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06
140	3.35	0.44	0.39	0.34	0.30	0.27	0.24	0.21	0.19	0.16	0.15	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05
160	2.93	0.38	0.34	0.30	0.26	0.23	0.21	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04
180	2.61	0.34	0.30	0.27	0.24	0.21	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04
200	2.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03
220	2.13	0.28	0.25	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03
240	1.95	0.25	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03
260	1.80	0.23	0.21	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03
280	1.67	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02
300	1.56	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02
350	1.34	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02

TABLE I.4

GROUP 2

ANNUAL INTEREST COST

$ PER HOUR PER $1000 NEW COST

(INTEREST RATE = 15.0%)

MACHINES - ALL TERRAIN VEHICLES
ANHYDROUS APPLICATORS
BALE MOVER
BALE STOOKERS
BALE WAGON
BEET HARVESTER
BEET DEFOLIATER
BEET TOPPER
BEET-TOP SAVER
BEET THINNER
CATTLE SCALE
CATTLE SQUEEZE
CHISEL PLOWS
COLD FLOW CONVERTER
CULTIVATORS
- NOBLE BLADE
- FIELD
- VIBRASHANK
- ROW-CROP
DELEVAN KIT
DISCS
DISCERS
DITCHERS
DRILLS
DOZER BLADES
ENGINES - AIR COOLED
ELECTRIC MOTORS
FORAGE BLOWERS
FORAGE BLOWER-PROCESSOR
FORAGE CHOPPERS
GENERATORS
GARDEN TRACTOR ATTACHMENTS
GRAIN BOXES
GRAIN DRYERS
GRANULAR HERBICIDE KITS
HARROWS
HARROW DRAWBARS
HAYSTACKER
HYDRAULIC LOADER
LAND PLANES
MOTORCYCLES
MOWERS
MOWER CONDITIONERS
PACKERS
PACKER DRAWBARS
PLANTERS-POTATO
-SUGAR BEET
-CORN
SNOWMOBILES
3 WHEEL BIKES
PLOWS
POST AUGERS
POST DRYERS
POTATO HARVESTER
POTATO PILER
POTATO SEED-CUTTER
POTATO SCOOPER
PULVIMULCHER
RAKES
ROCK PICKERS
ROCK WINDROWERS
ROD WEEDERS
ROTARY CUTTERS
ROTARY TILLERS
SILAGE LOADER
SPRAYERS
STACK MOVER
SNOWBLOWERS
SPREADERS-FERTILIZER
MANURE
SUB SOILER
TRUCKS
TRUCK BOXES
TRUCK HOISTS

HRS	YRS1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	5.74	3.75	3.32	2.94	2.60	2.30	2.04	1.80	1.60	1.41	1.25	1.11	0.98	0.87	0.77	0.68	0.60	0.53	0.47	0.42
40	2.87	1.88	1.66	1.47	1.30	1.15	1.02	0.90	0.80	0.71	0.63	0.55	0.49	0.43	0.38	0.34	0.30	0.27	0.24	0.21
60	1.91	1.25	1.11	0.98	0.87	0.77	0.68	0.60	0.53	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14
80	1.44	0.94	0.83	0.73	0.65	0.58	0.51	0.45	0.40	0.35	0.31	0.28	0.24	0.22	0.19	0.17	0.15	0.13	0.12	0.10
100	1.15	0.75	0.66	0.59	0.52	0.46	0.41	0.36	0.32	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08
120	0.96	0.63	0.55	0.49	0.43	0.38	0.34	0.30	0.27	0.24	0.21	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07
133	0.86	0.56	0.50	0.44	0.39	0.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06
140	0.82	0.54	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06
160	0.72	0.47	0.42	0.37	0.33	0.29	0.25	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.08	0.08	0.07	0.06	0.05
167	0.69	0.45	0.40	0.35	0.31	0.28	0.24	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05
180	0.64	0.42	0.37	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05
200	0.57	0.38	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04
220	0.52	0.34	0.30	0.27	0.24	0.21	0.19	0.16	0.15	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04
240	0.48	0.31	0.28	0.24	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03
260	0.44	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03

TABLE D.5

GROUP 3

ANNUAL DEPRECIATION COST

$ PER HOUR PER $1000 NEW COST

T.A.D. AS % OF NEW COST = 100 - [56.0(0.885)^n]

MACHINES - BALER
BALE ELEVATOR
CORN HEADERS
DRILL FILLER
FORAGE BLOWER
FORAGE BOX
FORAGE HARVESTER
GRAIN AUGER
HAY STACKER
MIXER FEEDER WAGON
MIXER MILL
ROLLER MILL

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	25.22	2.85	2.52	2.23	1.98	1.75	1.55	1.37	1.21	1.07	0.95	0.84	0.74	0.66	0.58	0.52	0.46	0.40	0.36	0.32
40	12.61	1.42	1.26	1.12	0.99	0.87	0.77	0.68	0.61	0.54	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.20	0.18	0.16
60	8.41	0.95	0.84	0.74	0.66	0.58	0.52	0.46	0.40	0.36	0.32	0.28	0.25	0.22	0.19	0.17	0.15	0.13	0.12	0.11
80	6.30	0.71	0.63	0.56	0.49	0.44	0.39	0.34	0.30	0.27	0.24	0.21	0.19	0.16	0.15	0.13	0.11	0.10	0.09	0.08
100	5.04	0.57	0.50	0.45	0.40	0.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06
120	4.20	0.47	0.42	0.37	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05
140	3.60	0.41	0.36	0.32	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05
160	3.15	0.36	0.32	0.28	0.25	0.22	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04
180	2.80	0.32	0.28	0.25	0.22	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.04
200	2.52	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03
220	2.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03
240	2.10	0.24	0.21	0.19	0.16	0.15	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03
260	1.94	0.22	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.04	0.03	0.03	0.02
280	1.80	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02
300	1.68	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02
350	1.44	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0 03	0.03	0.02	0.02	0.02
400	1.26	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02

TABLE I.5

GROUP 3

ANNUAL INTEREST COST

$ PER HOUR PER $1000 NEW COST

(INTEREST RATE = 15.0%)

MACHINES - BALER
BALE ELEVATOR
CORN HEADERS
DRILL FILLER
FORAGE BLOWER
FORAGE BOX
FORAGE HARVESTER
GRAIN AUGER
HAY STACKER
MIXER FEEDER WAGON
MIXER MILL
ROLLER MILL

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	5.61	3.50	3.10	2.74	2.43	2.15	1.90	1.68	1.49	1.32	1.17	1.03	0.91	0.81	0.72	0.63	0.56	0.50	0.44	0.39
40	2.80	1.75	1.55	1.37	1.21	1.07	0.95	0.84	0.74	0.66	0.58	0.52	0.46	0.40	0.36	0.32	0.28	0.25	0.22	0.19
60	1.87	1.17	1.03	0.91	0.81	0.72	0.63	0.56	0.50	0.44	0.39	0.34	0.30	0.27	0.24	0.21	0.19	0.17	0.15	0.13
80	1.40	0.88	0.78	0.69	0.61	0.54	0.48	0.42	0.37	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10
100	1.12	0.70	0.62	0.55	0.49	0.43	0.38	0.34	0.30	0.26	0.23	0.21	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08
120	0.93	0.58	0.52	0.46	0.40	0.36	0.32	0.28	0.25	0.22	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	0.07	0.06
133	0.84	0.53	0.47	0.41	0.37	0.32	0.29	0.25	0.22	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.08	0.07	0.07	0.06
140	0.80	0.50	0.44	0.39	0.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06
160	0.70	0.44	0.39	0.34	0.30	0.27	0.24	0.21	0.19	0.16	0.15	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05
167	0.67	0.42	0.37	0.33	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05
180	0.62	0.39	0.34	0.30	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04
200	0.56	0.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04
220	0.51	0.32	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04
240	0.47	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03
260	0.43	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03

TABLE D.6

GROUP 3

ANNUAL DEPRECIATION COST

$ PER HOUR PER $1000 NEW COST

T.A.D. AS % OF NEW COST = 100 [56.0(0.885)^n]
T.A.D. = TOTAL ACCUMULATED DEPRECIATION
n = YEARS

MACHINES - TUBMILL

HRS / YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
200	2.52	0.28	0.25	0.22	0.20	0.17	0.15	0.14	0.12	0.11	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03
250	2.02	0.23	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03
300	1.68	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02
350	1.44	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02
400	1.26	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02
450	1.12	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01
500	1.01	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
550	0.92	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
600	0.84	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
650	0.78	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
700	0.72	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
750	0.67	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
800	0.63	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
850	0.59	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
900	0.56	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
950	0.53	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1000	0.50	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

TABLE I.6
GROUP 3

ANNUAL INTEREST COST

$ PER HOUR PER $1000 NEW COST

(INTEREST RATE = 15.0%)

MACHINES - TUB MILL

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
200	0.56	0.35	0.31	0.27	0.24	0.21	0.19	0.17	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04
250	0.45	0.28	0.25	0.22	0.19	0.17	0.15	0.13	0.12	0.11	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.04	0.04
300	0.37	0.23	0.21	0.18	0.16	0.14	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03
350	0.32	0.20	0.18	0.16	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02
400	0.28	0.18	0.16	0.14	0.12	0.11	0.10	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02
450	0.25	0.16	0.14	0.12	0.11	0.10	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02
500	0.22	0.14	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02
550	0.20	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01
600	0.19	0.12	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01
650	0.17	0.11	0.10	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01
700	0.16	0.10	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
750	0.15	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
800	0.14	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
850	0.13	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
900	0.12	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
950	0.12	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
1000	0.11	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01

TABLE R.1

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = 0.120 (X)$^{1.5}$
LIFETIME HOURS = 12,000
T.A.R. AS % OF NEW COST = 120

MACHINES - TRACTORS

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
200	0.01	0.02	0.03	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09
250	0.01	0.03	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10
300	0.02	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10
350	0.02	0.03	0.04	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11
400	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12
450	0.02	0.04	0.05	0.05	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.13
500	0.02	0.04	0.05	0.06	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.14
550	0.02	0.04	0.05	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.13	0.14	0.14
600	0.02	0.04	0.05	0.06	0.07	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.14	0.15
650	0.02	0.04	0.06	0.07	0.07	0.08	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.15
700	0.02	0.04	0.06	0.07	0.08	0.08	0.09	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.16	0.16
750	0.02	0.05	0.06	0.07	0.08	0.09	0.10	0.10	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.16	0.16	0.17
800	0.03	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.11	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17
850	0.03	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.12	0.13	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18
900	0.03	0.05	0.06	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18
950	0.03	0.05	0.07	0.08	0.09	0.10	0.11	0.12	0.12	0.13	0.14	0.14	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19
1000	0.03	0.05	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.16	0.17	0.18	0.18	0.19	0.19

TABLE R.2

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $0.096(X)^{1.4}$
LIFETIME HOURS = 2,000
T.A.R. AS % OF NEW COST = 60

MACHINES - ALL-TERRAIN VEHICLES
ENGINE AIR COOLED
COMBINE SP & PTO
COMBINE PICKUP
MOWER ATTACHMENT
MOTOR CYCLE
ROCK PICKER
ROCK WINDROWER
ROTO-TILLER
SKID STEEL LOADERS
SNOW BLOWER
3 - WHEEL BIKES
SNOWMOBILES

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.05	0.08	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22
40	0.06	0.10	0.13	0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.26	0.27	0.27	0.28	0.28	0.29
60	0.07	0.12	0.15	0.17	0.19	0.21	0.22	0.23	0.25	0.26	0.27	0.28	0.29	0.30	0.30	0.31	0.32	0.33	0.34	0.34
80	0.08	0.14	0.17	0.19	0.21	0.23	0.25	0.26	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.38
100	0.09	0.15	0.18	0.21	0.23	0.25	0.27	0.29	0.30	0.31	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42
120	0.10	0.16	0.20	0.23	0.25	0.27	0.29	0.31	0.32	0.34	0.35	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45
140	0.10	0.17	0.21	0.24	0.27	0.29	0.31	0.33	0.34	0.36	0.37	0.39	0.40	0.41	0.43	0.44	0.45	0.46	0.47	0.48
160	0.11	0.18	0.22	0.25	0.28	0.31	0.33	0.35	0.36	0.38	0.40	0.41	0.42	0.44	0.45	0.46	0.47	0.49	0.50	0.51
180	0.12	0.19	0.23	0.27	0.30	0.32	0.34	0.36	0.38	0.40	0.41	0.43	0.44	0.46	0.47	0.48	0.50	0.51	0.52	0.53
200	0.12	0.20	0.24	0.28	0.31	0.33	0.36	0.38	0.40	0.42	0.43	0.45	0.46	0.48	0.49	0.51	0.52	0.53	0.54	0.55
220	0.13	0.21	0.25	0.29	0.32	0.35	0.37	0.39	0.41	0.43	0.45	0.47	0.48	0.50	0.51	0.52	0.54	0.55	0.56	0.58
240	0.13	0.21	0.26	0.30	0.33	0.36	0.38	0.41	0.43	0.45	0.47	0.48	0.50	0.51	0.53	0.54	0.56	0.57	0.58	0.60
260	0.13	0.22	0.27	0.31	0.34	0.37	0.40	0.42	0.44	0.46	0.48	0.50	0.51	0.53	0.55	0.56	0.58	0.59	0.60	0.62
280	0.14	0.23	0.28	0.32	0.35	0.38	0.41	0.43	0.45	0.48	0.49	0.51	0.53	0.55	0.56	0.58	0.59	0.61	0.62	0.63
300	0.14	0.23	0.29	0.33	0.36	0.39	0.42	0.44	0.47	0.49	0.51	0.53	0.55	0.56	0.58	0.59	0.61	0.62	0.64	0.65

TABLE R.3

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $0.096(X)^{1.4}$
LIFETIME HOURS = 2,500
T.A.R. AS % OF NEW COST

MACHINES - BEET DEFOLIATOR, CATTLE SCALE, CATTLE SQUEEZE, DITCHER, DOZER BLADE, ELECTRIC MOTOR, GENERATOR, GRAIN DRYER, HYDRAULIC TRACTOR LOADER, LAND PLANE, MANURE SPREADERS, MIXER MILL, SUB SOILER, SILAGE WAGON

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.04	0.06	0.07	0.08	0.09	0.10	0.10	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16
40	0.05	0.08	0.09	0.11	0.12	0.13	0.14	0.15	0.15	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.21
60	0.05	0.09	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.23	0.24	0.25	0.25
80	0.06	0.10	0.12	0.14	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.28	0.28
100	0.07	0.11	0.13	0.15	0.17	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.31
120	0.07	0.12	0.15	0.17	0.18	0.20	0.21	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.32	0.33
140	0.08	0.13	0.15	0.18	0.20	0.21	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.34	0.35
160	0.08	0.13	0.16	0.19	0.21	0.22	0.24	0.25	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.35	0.36	0.37
180	0.08	0.14	0.17	0.20	0.22	0.23	0.25	0.27	0.28	0.29	0.30	0.31	0.33	0.34	0.35	0.35	0.36	0.37	0.38	0.39
200	0.09	0.14	0.18	0.20	0.23	0.24	0.26	0.28	0.29	0.30	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41
220	0.09	0.15	0.18	0.21	0.23	0.25	0.27	0.29	0.30	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42
240	0.09	0.16	0.19	0.22	0.24	0.26	0.28	0.30	0.31	0.33	0.34	0.35	0.36	0.38	0.39	0.40	0.41	0.42	0.43	0.44
260	0.10	0.16	0.20	0.23	0.25	0.27	0.29	0.31	0.32	0.34	0.35	0.36	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45
280	0.10	0.17	0.20	0.23	0.26	0.28	0.30	0.32	0.33	0.35	0.36	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46
300	0.10	0.17	0.21	0.24	0.26	0.29	0.31	0.33	0.34	0.36	0.37	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.48

TABLE R.4

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $0.096(X)^{1.4}$
LIFETIME HOURS = 20,000
T.A.R. AS % OF NEW COST = 60

MACHINES - IRRIGATION SYSTEMS PIPE TRAILER
PACKERS MAIN LINE PUMPING UNITS

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
200	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
250	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
300	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03
350	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
400	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
450	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
500	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
550	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
600	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
650	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
700	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04
750	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
800	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
850	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
900	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04
950	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1000	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

TABLE R.5

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $0.127(X)^{1.4}$
LIFETIME HOURS = 2,000
T.A.R. AS % OF NEW COST = 80

MACHINES - CORN HEADERS
DELEVAN KIT
FORAGE BLOWER
FORAGE BLOWER-PROCESSOR
FORAGE CHOPPER
FORAGE HARVESTER
GRAIN BOXES
POST AUGER
POST DRIVER
POTATO PILER
POTATO SCOOPER
POTATO SEED CUTTER
ROTARY CUTTER
SILAGE LOADER
SPRAYER

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.06	0.10	0.13	0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.26	0.27	0.27	0.28	0.29	0.29
40	0.08	0.14	0.17	0.19	0.21	0.23	0.25	0.26	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.38
60	0.10	0.16	0.20	0.23	0.25	0.27	0.29	0.31	0.32	0.34	0.35	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45
80	0.11	0.18	0.22	0.26	0.28	0.31	0.33	0.35	0.36	0.38	0.40	0.41	0.43	0.44	0.45	0.46	0.48	0.49	0.50	0.51
100	0.12	0.20	0.24	0.28	0.31	0.33	0.36	0.38	0.40	0.42	0.43	0.45	0.46	0.48	0.49	0.51	0.52	0.53	0.54	0.56
120	0.13	0.21	0.26	0.30	0.33	0.36	0.38	0.41	0.43	0.45	0.47	0.48	0.50	0.52	0.53	0.54	0.56	0.57	0.58	0.60
140	0.14	0.23	0.28	0.32	0.35	0.38	0.41	0.43	0.46	0.48	0.50	0.51	0.53	0.55	0.56	0.58	0.59	0.61	0.62	0.64
160	0.15	0.24	0.29	0.34	0.37	0.40	0.43	0.46	0.48	0.50	0.52	0.54	0.56	0.58	0.60	0.61	0.63	0.64	0.66	0.67
180	0.15	0.25	0.31	0.35	0.39	0.42	0.45	0.48	0.50	0.53	0.55	0.57	0.59	0.61	0.62	0.64	0.66	0.67	0.69	0.70
200	0.16	0.26	0.32	0.37	0.41	0.44	0.47	0.50	0.53	0.55	0.57	0.59	0.61	0.63	0.65	0.67	0.69	0.70	0.72	0.73
220	0.17	0.27	0.33	0.38	0.42	0.46	0.49	0.52	0.55	0.57	0.59	0.62	0.64	0.66	0.68	0.69	0.71	0.73	0.75	0.76
240	0.17	0.28	0.35	0.40	0.44	0.47	0.51	0.54	0.57	0.59	0.62	0.64	0.66	0.68	0.70	0.72	0.74	0.75	0.77	0.79
260	0.18	0.29	0.36	0.41	0.45	0.49	0.52	0.56	0.58	0.61	0.64	0.66	0.68	0.70	0.72	0.74	0.76	0.78	0.80	0.81
280	0.18	0.30	0.37	0.42	0.47	0.51	0.54	0.57	0.60	0.63	0.65	0.68	0.70	0.72	0.74	0.76	0.78	0.80	0.82	0.84
300	0.19	0.31	0.38	0.43	0.48	0.52	0.56	0.59	0.62	0.65	0.67	0.70	0.72	0.74	0.77	0.79	0.81	0.83	0.84	0:86

TABLE R.6

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $0.127(X)^{1.4}$
LIFETIME HOURS = 2,500
T.A.R. AS % OF NEW COST = 80

MACHINES - BALER, BALE ELEVATOR, BALE MOVER, BALE WAGON, BEET HARVESTER, BEET TOP SAVER, BEET THINNER, FORAGE BOX, GRAIN AUGERS, MIXER FEEDER WAGON, PNEUMATIC GRAIN MOVER, ROLLER MILL

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.05	0.08	0.09	0.11	0.12	0.13	0.14	0.15	0.15	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.21
40	0.06	0.10	0.12	0.14	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.28	0.28
60	0.07	0.12	0.15	0.17	0.18	0.20	0.21	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.32	0.33
80	0.08	0.13	0.16	0.19	0.21	0.22	0.24	0.25	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.36	0.37
100	0.09	0.14	0.18	0.20	0.23	0.24	0.26	0.28	0.29	0.30	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41
120	0.10	0.16	0.19	0.22	0.24	0.26	0.28	0.30	0.31	0.33	0.34	0.35	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44
140	0.10	0.17	0.20	0.23	0.26	0.28	0.30	0.32	0.33	0.35	0.36	0.38	0.39	0.40	0.41	0.42	0.43	0.45	0.46	0.46
160	0.11	0.17	0.22	0.25	0.27	0.30	0.32	0.33	0.35	0.37	0.38	0.40	0.41	0.42	0.44	0.45	0.46	0.47	0.48	0.49
180	0.11	0.18	0.23	0.26	0.29	0.31	0.33	0.35	0.37	0.39	0.40	0.42	0.43	0.44	0.46	0.47	0.48	0.49	0.50	0.51
200	0.12	0.19	0.24	0.27	0.30	0.32	0.35	0.37	0.38	0.40	0.42	0.43	0.45	0.46	0.48	0.49	0.50	0.51	0.52	0.54
220	0.12	0.20	0.24	0.28	0.31	0.34	0.36	0.38	0.40	0.42	0.43	0.45	0.47	0.48	0.49	0.51	0.52	0.53	0.55	0.56
240	0.13	0.21	0.25	0.29	0.32	0.35	0.37	0.39	0.41	0.43	0.45	0.47	0.48	0.50	0.51	0.53	0.54	0.55	0.56	0.58
260	0.13	0.21	0.26	0.30	0.33	0.36	0.38	0.41	0.43	0.45	0.46	0.48	0.50	0.51	0.53	0.54	0.56	0.57	0.58	0.60
280	0.13	0.22	0.27	0.31	0.34	0.37	0.40	0.42	0.44	0.46	0.48	0.50	0.51	0.53	0.54	0.56	0.57	0.59	0.60	0.61
300	0.14	0.22	0.28	0.32	0.35	0.38	0.41	0.43	0.45	0.47	0.49	0.51	0.53	0.54	0.56	0.58	0.59	0.60	0.62	0.63

TABLE R.7

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $0.159(X)^{1.4}$
LIFETIME HOURS = 2,000
T.A.R. AS % OF NEW COST = 100

MACHINES - AIR SEEDERS
GRAIN DRILLS

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.08	0.13	0.16	0.18	0.20	0.22	0.24	0.25	0.26	0.27	0.29	0.30	0.31	0.32	0.32	0.33	0.34	0.35	0.36	0.37
40	0.10	0.17	0.21	0.24	0.27	0.29	0.31	0.33	0.35	0.36	0.38	0.39	0.40	0.42	0.43	0.44	0.45	0.46	0.47	0.48
60	0.12	0.20	0.25	0.28	0.32	0.34	0.37	0.39	0.41	0.42	0.44	0.46	0.47	0.49	0.50	0.52	0.53	0.54	0.55	0.57
80	0.14	0.23	0.28	0.32	0.35	0.38	0.41	0.43	0.46	0.48	0.50	0.51	0.53	0.55	0.56	0.58	0.59	0.61	0.62	0.64
100	0.15	0.25	0.31	0.35	0.39	0.42	0.45	0.47	0.50	0.52	0.54	0.56	0.58	0.60	0.62	0.63	0.65	0.67	0.68	0.70
120	0.16	0.27	0.33	0.38	0.42	0.45	0.48	0.51	0.54	0.56	0.58	0.61	0.63	0.65	0.66	0.68	0.70	0.72	0.73	0.75
140	0.17	0.28	0.35	0.40	0.44	0.48	0.51	0.54	0.57	0.60	0.62	0.64	0.67	0.69	0.71	0.73	0.74	0.76	0.78	0.80
160	0.18	0.30	0.37	0.42	0.47	0.51	0.54	0.57	0.60	0.63	0.65	0.68	0.70	0.72	0.75	0.77	0.78	0.80	0.82	0.84
180	0.19	0.31	0.39	0.44	0.49	0.53	0.57	0.60	0.63	0.66	0.69	0.71	0.74	0.76	0.78	0.80	0.82	0.84	0.86	0.89
200	0.20	0.33	0.40	0.46	0.51	0.55	0.59	0.63	0.66	0.69	0.72	0.74	0.77	0.79	0.81	0.84	0.86	0.88	0.90	0.92
220	0.21	0.34	0.42	0.48	0.53	0.57	0.61	0.65	0.68	0.71	0.74	0.77	0.80	0.82	0.85	0.87	0.89	0.91	0.93	0.95
240	0.21	0.35	0.43	0.50	0.55	0.59	0.64	0.67	0.71	0.74	0.77	0.80	0.83	0.85	0.88	0.90	0.92	0.94	0.97	0.99
260	0.22	0.36	0.45	0.51	0.57	0.61	0.66	0.70	0.73	0.76	0.80	0.82	0.85	0.88	0.90	0.93	0.95	0.98	1.00	1.02
280	0.23	0.37	0.46	0.53	0.58	0.63	0.68	0.72	0.75	0.79	0.82	0.85	0.88	0.91	0.93	0.96	0.98	1.00	1.03	1.05
300	0.23	0.38	0.47	0.54	0.60	0.65	0.70	0.74	0.77	0.81	0.84	0.87	0.90	0.93	0.96	0.98	1.01	1.03	1.06	1.08

TABLE R.8

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $0.159(X)^{1.4}$
LIFETIME HOURS = 2,500
T.A.R. AS % OF NEW COST = 100

MACHINES - BALE STOOKER
HAY STACKER
MOWER
MOWER CONDITIONER
RAKE
STACK BUILDER
STACK FEEDER
STACK MOVER
SWATHER

HRS	YRS1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.06	0.10	0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27
40	0.08	0.13	0.15	0.18	0.20	0.21	0.23	0.24	0.25	0.26	0.28	0.29	0.30	0.30	0.31	0.32	0.33	0.34	0.35	0.35
60	0.09	0.15	0.18	0.21	0.23	0.25	0.27	0.28	0.30	0.31	0.32	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.41
80	0.10	0.17	0.20	0.23	0.26	0.28	0.30	0.32	0.33	0.35	0.36	0.38	0.39	0.40	0.41	0.42	0.44	0.45	0.46	0.47
100	0.11	0.18	0.22	0.26	0.28	0.31	0.33	0.35	0.36	0.38	0.40	0.41	0.43	0.44	0.45	0.46	0.48	0.49	0.50	0.51
120	0.12	0.20	0.24	0.28	0.30	0.33	0.35	0.37	0.39	0.41	0.43	0.44	0.46	0.47	0.49	0.50	0.51	0.52	0.54	0.55
140	0.13	0.21	0.26	0.29	0.32	0.35	0.37	0.40	0.42	0.44	0.45	0.47	0.49	0.50	0.52	0.53	0.54	0.56	0.57	0.58
160	0.13	0.22	0.27	0.31	0.34	0.37	0.40	0.42	0.44	0.46	0.48	0.50	0.51	0.53	0.55	0.56	0.57	0.59	0.60	0.61
180	0.14	0.23	0.28	0.32	0.36	0.39	0.41	0.44	0.46	0.48	0.50	0.52	0.54	0.56	0.57	0.59	0.60	0.62	0.63	0.64
200	0.15	0.24	0.29	0.34	0.37	0.40	0.43	0.46	0.48	0.50	0.52	0.54	0.56	0.58	0.60	0.61	0.63	0.64	0.66	0.67
220	0.15	0.25	0.31	0.35	0.39	0.42	0.45	0.48	0.50	0.52	0.54	0.56	0.58	0.60	0.62	0.64	0.65	0.67	0.68	0.70
240	0.16	0.26	0.32	0.36	0.40	0.44	0.47	0.49	0.52	0.54	0.56	0.58	0.60	0.62	0.64	0.66	0.68	0.69	0.71	0.72
260	0.16	0.27	0.33	0.37	0.41	0.45	0.48	0.51	0.53	0.56	0.58	0.60	0.62	0.64	0.66	0.68	0.70	0.71	0.73	0.75
280	0.17	0.27	0.34	0.39	0.43	0.46	0.49	0.52	0.55	0.58	0.60	0.62	0.64	0.66	0.68	0.70	0.72	0.74	0.75	0.77
300	0.17	0.28	0.35	0.40	0.44	0.48	0.51	0.54	0.57	0.59	0.62	0.64	0.66	0.68	0.70	0.72	0.74	0.76	0.77	0.79

TABLE R.9

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $0.159(X)^{1.4}$
LIFETIME HOURS = 5,000
T.A.R. AS % OF NEW COST = 100

MACHINES - TILT BOX WAGON

YRS / HRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.02	0.04	0.04	0.05	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10
40	0.03	0.05	0.06	0.07	0.07	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.13
60	0.03	0.06	0.07	0.08	0.09	0.09	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.16
80	0.04	0.06	0.08	0.09	0.10	0.11	0.11	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.18
100	0.04	0.07	0.08	0.10	0.11	0.12	0.12	0.13	0.14	0.14	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.18	0.19	0.19
120	0.05	0.07	0.09	0.10	0.12	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21
140	0.05	0.08	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22
160	0.05	0.08	0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	0.23	0.23
180	0.05	0.09	0.11	0.12	0.14	0.15	0.16	0.17	0.17	0.18	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.23	0.24	0.24
200	0.06	0.09	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.23	0.23	0.24	0.24	0.25	0.25
220	0.06	0.09	0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.23	0.23	0.24	0.25	0.25	0.26	0.26
240	0.06	0.10	0.12	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.21	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.27
260	0.06	0.10	0.12	0.14	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.28	0.28
280	0.06	0.10	0.13	0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.26	0.27	0.27	0.28	0.28	0.29
300	0.07	0.11	0.13	0.15	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.27	0.28	0.29	0.29	0.30

TABLE R.10

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $0.191(X)^{1.4}$
LIFETIME HOURS = 1,200
T.A.R. AS % OF NEW COST = 120

MACHINES - ANHYDROUS APPLICATORS
COLD FLOW CONVERTER
DRY FERTILIZER SPREADER
GRANULAR HERBICIDE KIT

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.20	0.32	0.39	0.45	0.50	0.54	0.58	0.61	0.64	0.67	0.70	0.73	0.75	0.77	0.80	0.82	0.84	0.86	0.88	0.90
40	0.26	0.42	0.52	0.59	0.66	0.71	0.76	0.81	0.85	0.89	0.92	0.96	0.99	1.02	1.05	1.08	1.11	1.13	1.16	1.19
60	0.30	0.50	0.61	0.70	0.77	0.84	0.90	0.95	1.00	1.04	1.09	1.13	1.16	1.20	1.24	1.27	1.30	1.33	1.36	1.39
80	0.34	0.56	0.69	0.78	0.87	0.94	1.01	1.07	1.12	1.17	1.22	1.26	1.31	1.35	1.39	1.42	1.46	1.50	1.53	1.56
100	0.37	0.61	0.75	0.86	0.95	1.03	1.10	1.16	1.22	1.28	1.33	1.38	1.43	1.47	1.52	1.56	1.60	1.63	1.67	1.71
120	0.40	0.66	0.81	0.92	1.02	1.11	1.19	1.25	1.32	1.38	1.43	1.49	1.54	1.59	1.63	1.68	1.72	1.76	1.80	1.84
140	0.43	0.70	0.86	0.98	1.09	1.18	1.26	1.33	1.40	1.46	1.52	1.58	1.63	1.69	1.73	1.78	1.83	1.87	1.91	1.95
160	0.45	0.74	0.90	1.04	1.15	1.24	1.33	1.41	1.48	1.55	1.61	1.67	1.72	1.78	1.83	1.88	1.93	1.97	2.02	2.06
180	0.47	0.77	0.95	1.09	1.20	1.30	1.39	1.47	1.55	1.62	1.69	1.75	1.81	1.86	1.92	1.97	2.02	2.07	2.11	2.16
200	0.49	0.80	0.99	1.13	1.25	1.36	1.45	1.54	1.62	1.69	1.76	1.82	1.89	1.94	2.00	2.06	2.11	2.16	2.21	2.25
220	0.51	0.84	1.03	1.18	1.30	1.41	1.51	1.60	1.68	1.76	1.83	1.89	1.96	2.02	2.08	2.13	2.19	2.24	2.29	2.34
240	0.53	0.86	1.06	1.22	1.35	1.46	1.56	1.65	1.74	1.82	1.89	1.96	2.03	2.09	2.15	2.21	2.27	2.32	2.37	2.42
260	0.54	0.89	1.10	1.26	1.39	1.51	1.61	1.71	1.79	1.88	1.95	2.03	2.09	2.16	2.22	2.28	2.34	2.40	2.45	2.50
280	0.56	0.92	1.13	1.30	1.43	1.55	1.66	1.76	1.85	1.93	2.01	2.09	2.16	2.22	2.29	2.35	2.41	2.47	2.52	2.58
300	0.58	0.95	1.16	1.33	1.47	1.60	1.71	1.81	1.90	1.99	2.07	2.14	2.22	2.29	2.35	2.42	2.48	2.54	2.59	2.65

TABLE B.18

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

$T.A.R. = 0.191(X)^{1.6}$
LIFETIME HOURS = 10,000
T.A.R. AS % OF NEW COST =120

MACHINES - TUB MILL

YRS HRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
200	0.03	0.04	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.12
250	0.03	0.05	0.06	0.06	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.13
300	0.03	0.05	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14
350	0.03	0.05	0.06	0.07	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.14	0.14	0.14	0.14
400	0.03	0.05	0.07	0.08	0.08	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15
450	0.03	0.06	0.07	0.08	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16
500	0.04	0.06	0.07	0.08	0.09	0.10	0.11	0.11	0.12	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.16	0.17
550	0.04	0.06	0.08	0.09	0.10	0.10	0.11	0.12	0.12	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.17
600	0.04	0.06	0.08	0.09	0.10	0.11	0.12	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.18	0.18
650	0.04	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.13	0.14	0.14	0.15	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.19
700	0.04	0.07	0.08	0.10	0.11	0.12	0.12	0.13	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19
750	0.04	0.07	0.09	0.10	0.11	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20
800	0.04	0.07	0.09	0.10	0.11	0.12	0.13	0.14	0.14	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20
850	0.04	0.07	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.15	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21
900	0.05	0.08	0.09	0.11	0.12	0.13	0.14	0.14	0.15	0.16	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.21
950	0.05	0.08	0.09	0.11	0.12	0.13	0.14	0.15	0.15	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.22
1000	0.05	0.08	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22

TABLE R.12

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $0.301(X)^{1.3}$
LIFETIME HOURS =2,500
T.A.R. AS % OF NEW COST = 120

MACHINES - CHISEL PLOW
CORN PLANTER
CULTIVATOR-FIELD
-NOBLE BLADE
-ROW-CROP
-VIBRASHANK
DISC
DISCER
ECONOMOD
HARROWS
HARROW DRAWBAR
PACKER DRAWBAR
PLANTERS-BEET
PLANTERS
-POTATO
PLOW-MOLDBOARD
PULVI-MULCHER
RIDGER
ROD WEEDER
ROTARY TILLER
(ROTO-TILLER)
STUBBLE TREADER

YRS / HRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.11	0.16	0.19	0.21	0.23	0.24	0.26	0.27	0.28	0.29	0.30	0.30	0.31	0.32	0.33	0.33	0.34	0.35	0.35	0.36
40	0.14	0.20	0.24	0.26	0.28	0.30	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.43	0.44
60	0.16	0.23	0.27	0.30	0.32	0.34	0.36	0.37	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50
80	0.17	0.25	0.29	0.32	0.35	0.37	0.39	0.41	0.42	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54
100	0.18	0.27	0.31	0.35	0.37	0.40	0.42	0.43	0.45	0.47	0.48	0.49	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.58
120	0.19	0.28	0.33	0.36	0.39	0.42	0.44	0.46	0.48	0.49	0.51	0.52	0.53	0.55	0.56	0.57	0.58	0.59	0.60	0.61
140	0.20	0.30	0.34	0.38	0.41	0.44	0.46	0.48	0.50	0.52	0.53	0.55	0.56	0.57	0.59	0.60	0.61	0.62	0.63	0.64
160	0.21	0.31	0.36	0.40	0.43	0.46	0.48	0.50	0.52	0.54	0.55	0.57	0.58	0.60	0.61	0.62	0.63	0.64	0.66	0.67
180	0.22	0.32	0.37	0.41	0.44	0.47	0.50	0.52	0.54	0.56	0.57	0.59	0.60	0.62	0.63	0.64	0.66	0.67	0.68	0.69
200	0.22	0.33	0.38	0.43	0.46	0.49	0.51	0.53	0.55	0.57	0.59	0.61	0.62	0.64	0.65	0.66	0.68	0.69	0.70	0.71
220	0.23	0.34	0.40	0.44	0.47	0.50	0.53	0.55	0.57	0.59	0.61	0.63	0.64	0.66	0.67	0.68	0.70	0.71	0.72	0.73
240	0.24	0.35	0.41	0.45	0.48	0.51	0.54	0.56	0.59	0.61	0.62	0.64	0.66	0.67	0.69	0.70	0.72	0.73	0.74	0.75
260	0.24	0.36	0.42	0.46	0.50	0.53	0.55	0.58	0.60	0.62	0.64	0.66	0.67	0.69	0.70	0.72	0.73	0.75	0.76	0.77
280	0.25	0.36	0.42	0.47	0.51	0.54	0.57	0.59	0.61	0.63	0.65	0.67	0.69	0.71	0.72	0.74	0.75	0.76	0.78	0.79
300	0.25	0.37	0.43	0.48	0.52	0.55	0.58	0.60	0.63	0.65	0.67	0.69	0.70	0.72	0.74	0.75	0.76	0.78	0.79	0.80

TABLE B.13

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = .191(X)$^{1.4}$
LIFETIME HOURS = 3000
T.A.R. AS % OF NEW COST = 120

MACHINES - GARDEN TRACTOR
TRUCKS

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.05	0.09	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.23	0.23	0.24	0.24	0.25
40	0.07	0.12	0.14	0.16	0.18	0.20	0.21	0.22	0.24	0.25	0.26	0.27	0.27	0.28	0.29	0.30	0.31	0.31	0.32	0.33
60	0.08	0.14	0.17	0.19	0.21	0.23	0.25	0.26	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39
80	0.09	0.15	0.19	0.22	0.24	0.26	0.28	0.30	0.31	0.32	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43
100	0.10	0.17	0.21	0.24	0.26	0.29	0.30	0.32	0.34	0.36	0.37	0.38	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47
120	0.11	0.18	0.22	0.26	0.28	0.31	0.33	0.35	0.37	0.38	0.40	0.41	0.43	0.44	0.45	0.46	0.48	0.49	0.50	0.51
140	0.12	0.19	0.24	0.27	0.30	0.33	0.35	0.37	0.39	0.41	0.42	0.44	0.45	0.47	0.48	0.49	0.51	0.52	0.53	0.54
160	0.12	0.20	0.25	0.29	0.32	0.34	0.37	0.39	0.41	0.43	0.45	0.46	0.48	0.49	0.51	0.52	0.53	0.55	0.56	0.57
180	0.13	0.21	0.26	0.30	0.33	0.36	0.39	0.41	0.43	0.45	0.47	0.48	0.50	0.52	0.53	0.55	0.56	0.57	0.59	0.60
200	0.14	0.22	0.27	0.31	0.35	0.38	0.40	0.43	0.45	0.47	0.49	0.51	0.52	0.54	0.55	0.57	0.58	0.60	0.61	0.62
220	0.14	0.23	0.28	0.33	0.36	0.39	0.42	0.44	0.47	0.49	0.51	0.53	0.54	0.56	0.58	0.59	0.61	0.62	0.64	0.65
240	0.15	0.24	0.29	0.34	0.37	0.40	0.43	0.46	0.48	0.50	0.52	0.54	0.56	0.58	0.60	0.61	0.63	0.64	0.66	0.67
260	0.15	0.25	0.30	0.35	0.39	0.42	0.45	0.47	0.50	0.52	0.54	0.56	0.58	0.60	0.62	0.63	0.65	0.66	0.68	0.69
280	0.16	0.25	0.31	0.36	0.40	0.43	0.46	0.49	0.51	0.54	0.56	0.58	0.60	0.62	0.63	0.65	0.67	0.68	0.70	0.71
300	0.16	0.26	0.32	0.37	0.41	0.44	0.47	0.50	0.53	0.55	0.57	0.59	0.61	0.63	0.65	0.67	0.69	0.70	0.72	0.73

TABLE R.14

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $.191(X)^{1.4}$
LIFETIME HOURS = 2000
T.A.R. AS % OF NEW COST = 120

MACHINES - POTATO HARVESTER

HRS \ YRS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.10	0.16	0.19	0.22	0.24	0.26	0.28	0.30	0.31	0.33	0.34	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44
40	0.13	0.21	0.25	0.29	0.32	0.35	0.37	0.39	0.42	0.43	0.45	0.47	0.48	0.50	0.51	0.53	0.54	0.55	0.57	0.58
60	0.15	0.24	0.30	0.34	0.38	0.41	0.44	0.46	0.49	0.51	0.53	0.55	0.57	0.59	0.60	0.62	0.64	0.65	0.67	0.68
80	0.17	0.27	0.34	0.38	0.42	0.46	0.49	0.52	0.55	0.57	0.60	0.62	0.64	0.66	0.68	0.70	0.71	0.73	0.75	0.76
100	0.18	0.30	0.37	0.42	0.46	0.50	0.54	0.57	0.60	0.63	0.65	0.68	0.70	0.72	0.74	0.76	0.78	0.80	0.82	0.84
120	0.20	0.32	0.39	0.45	0.50	0.54	0.58	0.61	0.64	0.67	0.70	0.73	0.75	0.78	0.80	0.82	0.84	0.86	0.88	0.90
140	0.21	0.34	0.42	0.48	0.53	0.58	0.62	0.65	0.69	0.72	0.75	0.77	0.80	0.82	0.85	0.87	0.89	0.91	0.94	0.96
160	0.22	0.36	0.44	0.51	0.56	0.61	0.65	0.69	0.72	0.76	0.79	0.82	0.84	0.87	0.90	0.92	0.94	0.97	0.99	1.01
180	0.23	0.38	0.46	0.53	0.59	0.64	0.68	0.72	0.76	0.79	0.82	0.86	0.88	0.91	0.94	0.96	0.99	1.01	1.03	1.06
200	0.24	0.39	0.48	0.55	0.61	0.66	0.71	0.75	0.79	0.83	0.86	0.89	0.92	0.95	0.98	1.01	1.03	1.06	1.08	1.10
220	0.25	0.41	0.50	0.58	0.64	0.69	0.74	0.78	0.82	0.86	0.89	0.93	0.96	0.99	1.02	1.04	1.07	1.10	1.12	1.14
240	0.26	0.42	0.52	0.60	0.66	0.71	0.76	0.81	0.85	0.89	0.93	0.96	0.99	1.02	1.05	1.08	1.11	1.14	1.16	1.19
260	0.27	0.44	0.54	0.62	0.68	0.74	0.79	0.83	0.88	0.92	0.96	0.99	1.02	1.06	1.09	1.12	1.14	1.17	1.20	1.22
280	0.27	0.45	0.55	0.63	0.70	0.76	0.81	0.86	0.90	0.95	0.98	1.02	1.06	1.09	1.12	1.15	1.18	1.21	1.23	1.26
300	0.28	0.46	0.57	0.65	0.72	0.78	0.83	0.88	0.93	0.97	1.01	1.05	1.08	1.12	1.15	1.18	1.21	1.24	1.27	1.30

TABLE R.15

ANNUAL REPAIR COSTS

$ PER HOUR PER $1000 NEW COST

T.A.R. = $.127(X)^{1.4}$
LIFETIME HOURS = 1200
T.A.R. AS % OF NEW COST = 80

MACHINES - TRUCK HOISTS

HRS	YRS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
20	0.13	0.21	0.26	0.30	0.33	0.36	0.38	0.41	0.43	0.45	0.47	0.48	0.50	0.51	0.53	0.54	0.56	0.57	0.58	0.60
40	0.17	0.28	0.35	0.40	0.44	0.47	0.51	0.54	0.56	0.59	0.61	0.64	0.66	0.68	0.70	0.72	0.74	0.75	0.77	0.79
60	0.20	0.33	0.41	0.47	0.51	0.56	0.60	0.63	0.66	0.69	0.72	0.75	0.77	0.80	0.82	0.84	0.87	0.89	0.91	0.93
80	0.23	0.37	0.46	0.52	0.58	0.63	0.67	0.71	0.74	0.78	0.81	0.84	0.87	0.90	0.92	0.95	0.97	0.99	1.02	1.04
100	0.25	0.41	0.50	0.57	0.63	0.68	0.73	0.77	0.81	0.85	0.89	0.92	0.95	0.98	1.01	1.04	1.06	1.09	1.11	1.14
120	0.27	0.44	0.54	0.61	0.68	0.74	0.79	0.83	0.88	0.92	0.95	0.99	1.02	1.05	1.08	1.11	1.14	1.17	1.20	1.22
140	0.28	0.46	0.57	0.65	0.72	0.78	0.84	0.89	0.93	0.97	1.01	1.05	1.09	1.12	1.15	1.18	1.21	1.24	1.27	1.30
160	0.30	0.49	0.60	0.69	0.76	0.83	0.88	0.93	0.98	1.03	1.07	1.11	1.15	1.18	1.22	1.25	1.28	1.31	1.34	1.37
180	0.31	0.51	0.63	0.72	0.80	0.87	0.93	0.98	1.03	1.08	1.12	1.16	1.20	1.24	1.28	1.31	1.34	1.38	1.41	1.44
200	0.33	0.53	0.66	0.75	0.83	0.90	0.97	1.02	1.07	1.12	1.17	1.21	1.25	1.29	1.33	1.37	1.40	1.43	1.47	1.50
220	0.34	0.56	0.68	0.78	0.87	0.94	1.00	1.06	1.12	1.17	1.21	1.26	1.30	1.34	1.38	1.42	1.46	1.49	1.52	1.56
240	0.35	0.57	0.71	0.81	0.90	0.97	1.04	1.10	1.16	1.21	1.26	1.30	1.35	1.39	1.43	1.47	1.51	1.54	1.58	1.61
260	0.36	0.59	0.73	0.84	0.92	1.00	1.07	1.14	1.19	1.25	1.30	1.35	1.39	1.44	1.48	1.52	1.56	1.59	1.63	1.66
280	0.37	0.61	0.75	0.86	0.95	1.03	1.10	1.17	1.23	1.29	1.34	1.39	1.43	1.48	1.52	1.56	1.60	1.64	1.68	1.71
300	0.38	0.63	0.77	0.89	0.98	1.06	1.13	1.20	1.26	1.32	1.38	1.43	1.47	1.52	1.56	1.61	1.65	1.69	1.72	1.76

BIBLIOGRAPHY

Andruchow, L. J., Farm Machinery Costs; Economic Services Division, Alberta Department of Agriculture, 1980.

ASAE Date, ASAE D230.2; Agricultural Machinery Management Data; American Society of Agricultural Engineers; St. Joseph, Michigan, 1971.

ASAE Farm Machinery Management Committee; Farm Machinery Costs and Use; p. 279-283; Agricultural Engineers Year-book; American Society of Agricultural Engineers, St. Joseph, Michican, 1970.

Bowers, J.A. Farm Tractor Repair Costs and Comparison of Cost of Operation of Diesel, Gasoline and L.P. - Gas Tractors; Department of Agricultural Engineering, University of Illinois; Urbana, Illinois, 1966.

Bowers, W. Modern Concepts of Farm Machinery Management; Oklahoma State University, Stillwater, Oklahoma, 1970.

_____. Costs of Owning and Operating Farm Machinery; University of Illinois, College of Agriculture, Urbana, Illinois, 1966.

Creer, J.D., Henderson, P.A. and Schepler, L.A.; Costs of Owning and Operating Farm Machinery; Lincoln, University of Nebraska, College of Agriculture and Home Economics, EC 69-836, 1969.

Culpin, C. Profitable Farm Mechanization; Crosby, Lockwood & Son Ltd., London, 1968.

Dillon, W.J. Farm Machinery Costs - Schedule of Rates for Different Types of Machines in Ontario, Ontario Department of Agriculture and Food, 1971.

Johnson, L.M. Machinery Costs on Parkland Grain - Cattle Farms in Central Alberta, Economics Branch Publication 71/16, Canada Department of Agriculture, 1971.

Larsen, W.E., and Bowers, W. Tables for Estimating Cost of Owning and Operating Farm Machinery; Tucson, University of Arizona, Agricultural Extension Service Mimeo, 1965.

McHardy, F.V. Methods of Sizing Machines for Weather Dependent Operations; Canadian Agricultural Engineering, Vol. 8 #1, 1971.

Miller, R.J. Farm Machine Costs - Alberta, F.M.D.M. 403-28, Economics Division, Alberta Department of Agriculture, 1966.

Maisonneuve, M. and Shortreed, J. Farm Machinery Costs, Marketing Intelligence Division, Alberta Department of Agriculture, 1972.

Peck, J.A. Farm Machinery in Perspective, Prairie Books Department of the Western Producers, 1965.

Puzey, G.A. ASAW Annual Meeting, Paper No. 66-673, December, 1966.

Reed, A.D. Machinery Costs and Performance, Davis University of California, College of Agriculture, May, 1970.

Richey, C.B., and Hunt, D.R., Determining Usage Costs for Farm Tractors and Field Machines, Cooperative Extension Service, Purdue University, Lafayette, Indiana, 1971.

Thompson, J.L. Agricultural Machinery Costs, C.D.A. Publication 1291, 1966.

_____. Comparison of the Power Costs of Tractors, C.D.A. Publication 1040, 1967.

Thorfinnson, T.S., and Epp, A.W. Cost of Operating Tillage and Harvest Machinery in Nebraska, 1964, Nebraska Experimental Station Bulletin SB-475.

SOURCES OF FARM MACHINERY PRICES

Alberta Farm Building Sales Ltd.
Edmonton

Alberta All-Terrain Vehicles
Edmonton

Alberta Cycle & Motor Co. Ltd.
Edmonton

Alberta Wheat Pool Ltd.
Edmonton

Alberta Wheat Pool
Calgary

Alderson Equipment Ltd.
(IHC)
Fort Sasatchewan

Allied Farm Equipment Ltd.
Edmonton

Alteen Distributors Ltd.
Wetaskawin

Armand Truck Body Works
Edmonton

Blanchard Limited
Saskatoon

Brandon Petroleum Ltd.
Edmonton

Bridge Farm Centre (1970) Ltd.
(Noble Blade) (Versatile)
Lethbridge

Canadian Home Assurance Co.
Edmonton

Cantin's Pressure Service Ltd.
(ATV)
Edmonton

Carruthers Implements Ltd.
Edmonton

Case Power and Equipment Ltd.
Calgary

Case Power And Equipment Ltd.
Morinville

Cheetah Cycle Sales Ltd.
Edmonton

Co-op Implements
Lethbridge

Co-op Implements
Vegreville

Custom Hoist and Truck Body
Edmonton

D.C.D. Industries Ltd.
(Massey-Ferguson)
Edmonton

Deerland Farm Equipment
Fort Saskatchewan

Edwards Rod Weeder
Lethbridge

E.O. Perry Farm Machinery
(Massey Ferguson)
Calgary

Evcon Farm Equipment
(Sperry New Holland)
Lethbridge

Farm Choring Ltd.
Nisku

Flexicoil Limited
Saskatoon

Friggstad Manufacturing Ltd.
Frontier

F.N. Pneumatic Manufacturing
Carseland

Green Power Ltd.
(John Deere)
Taber

Good Times Centre
Edmonton

Hauser Tractor and Farm Equipment
(Sales) Ltd. (Ford)
Edmonton

Healy Truck Centre
Edmonton

Imperial Oil Ltd.
Edmonton

Imperial Oil Limited
Fort Saskatchewan
International Truck
Edmonton

Kirchner Machine
Lethbridge

Kuelker's Manufacturing
Didsbury

Langen Implements Ltd.
(IHC)
Calgary

Major Irrigation
Lethbridge

Manark Industrial Sales
(AVT)
Edmonton

Martin Farm Equipment
(John Deere)
Edmonton

McKay Brothers
(John Deere)
Lethbridge

Neufeldt Industries
Lethbridge

New Way Irrigation
Taber

Nickelson Chevrolet
(Chev. Trucks)
Edmonton

Oliver Agricultural Supply
Lethbridge

Oliver Agricultural Supply
Edmonton

O & R Irrigation
Taber

Renn Sales Ltd.
Edmonton

Revelstoke Companies Ltd.
Edmonton

R.H. House International Equipment
Lethbridge

Selmac Sales Ltd.
(Allis Chalmers)
Stony Plain

Sketcher and Turner Farm Equipment
(White)
Edmonton

Sperry New Holland Edmonton
Edmonton

Suburban Equipment and Supply Ltd.
Edmonton

The Co-operators Insurance Co. Ltd.
Edmonton

Thompson's Vac. Sales & Service Ltd.
Calgary

United Farmers of Alberta Co-op Ltd.
Edmonton

Victory Equipment Ltd.
Lethbridge

Wawanesa Mutual Insurance Co. Ltd.
Edmonton

Westcan Irrigation
Lethbridge

Westeel-Rosco Limited
Edmonton

Western GMC Limited
Edmonton

Wheat Belt Industries Ltd.
Calgary

W.R. Scott Equipment
Edmonton